FEB 16 1956

VOLUME 40 . NUMBER 217

FEBRUARY, 1956



OF THE NATIONAL ASSOCIATION

OF SECONDARY- SCHOOL PRINCIPALS





What Should We Expect of Education?

also

Requisites for Economic Literacy

SERVICE ORGAN FOR AMERICAN SECONDARY SCHOOLS

THE CONTENTS OF THIS BULLETIN ARE LISTED IN "EDUCATION INDEX"

Second-class mail privilege authorized at Washington, D.C., and additional entry at Baltimore, Md.

NATIONAL ASSOCIATION OF SECONDARY-SCHOOL PRINCIPALS

NATIONAL EDUCATION ASSOCIATION 1955-56

OFFICERS

President: LELAND N. DRAKE
Principal, Mohawk Junior High School, Columbus, Ohio
First Vice-President: GEORGE L. CLELAND
Secondary-School Consultant, State Department of Education, Topeka, Kansas
Second Vice-President: R. B. NORMAN
Principal, Amarillo High School, Amarillo, Texas
Executive Secretary: PAUL E. ELICKER
1201 Sixteenth Street, N. W., Washington 6, D. C.

EXECUTIVE COMMITTEE

All officers and the following additional members:

JAMES E. BLUE

Principal, West Senior High School, Rockford, Illinois

JAMES E. NANCARROW

Principal, Upper Darby High School, Upper Darby, Pennsylvania

GEORGE E. SHATTUCK

Principal, Norwich Free Academy, Norwich, Connecticut

CLIFF ROBINSON

Director of Secondary Education, State Department of Education, Salem, Oregon

NATIONAL COUNCIL OF THE NATIONAL HONOR SOCIETY

HYRTL C. FEEMAN, Chairman Principal, Walter French Junior High School, Lansing, Michigan ROBERT L. FOOSE
Principal, Westfield Senior High School, Westfield, New Jersey FLOYD HONEY Principal, Lubbock Senior High School, Lubbock, Texas G. W. JANKE Principal, Mitchell High School, Mitchell, South Dakota DEAN W. MICKELWAIT Principal, Eugene High School, Eugene, Oregon FRANK A. PEAKE Principal, Shades Valley High School, Birmingham, Alabama HOWARD B. TINGLEY Principal, Petaluma Junior High School, Petaluma, California THE REV. GORDON F. WALTER, O.P. Principal, Fenwick High School, Oak Park, Illinois CARLETON L. WIGGIN

Principal, Deering High School, Portland, Maine PAUL E. ELICKER, Secretary

Issued Nine Times a Year

\$8.00 a Year

Monthly, September to May Inclusive

noton D. C. by the National Association of Secondary

\$1.50. Postpaid

Published at Washington, D. C., by the National Association of Secondary-School Principals of the National Education Association, 1201 Sixteenth Street, N. W., Washington 6, D. C.





Your Biology Department should have the Welch-Smallwood Botanical - Zoological Charts



60 CHARTS

30

Botanical Charts with more than 400 drawings.

30

Zoological charts with more than 350 drawings.

Clearly labeled large illustrations.

No. 6939

Available for constant pupil reference—Meet the requirements of all high school texts and manuals.

No. 6939—Botanical Charts set of 30 tripod or wall bracket mounting

Ne. 6940—Zoological Charts set of 30 tripod or wall bracket mounting

Per Set \$27.50

No. 6941—Biological Charts set of 60—combined set of 30 Botanical and 30 Zoological charts in wall bracket or tripod mounting.......Per Set \$45.00

> Have Your Instructor Write For Complete Booklet On These and Many Other Fine Welch Teaching Charts

W. M. WELCH SCIENTIFIC COMPANY

DIVISION OF W. M. WELCH MANUFACTURING COMPANY

Established 1880

1515 Sedgwick Street

Dept. G-1

Chicago 10, III., U.S.A.

For Your Information

The part of this publication entitled What Should We Expect of Education? by Dr. Homer T. Rosenberger is also available in book form with hard-bound covers.

We thought so well of it that we have the impression that many of our members would want a hard-bound copy for their library in addition to the regular copy of THE BULLETIN. We are now filling orders for this book. We shall be glad to receive your order.

Since the book will be of interest to lay people and school board members, you may want to inform them of its availability or you may personally want to present them with copies.

We would also appreciate it if you would write a review of the book and have it published in your local daily or weekly newspaper. Will you do this for your Association? It is a good way to bring your patrons up to date on what a good school system should do.

> Price, \$3.00 each, net. Order from:

The National Association of Secondary-School Principals
1201 Sixteenth St., N. W. Washington 6, D. C.



Last Call for the Convention

OF THE

NATIONAL ASSOCIATION OF SECONDARY-SCHOOL PRINCIPALS

ARRANGED IN CO-OPERATION WITH THE

ILLINOIS SECONDARY-SCHOOL PRINCIPALS' ASSOCIATION

Conrad Hilton Hotel, Chicago, Illinois February 25-29, 1956

BEGINNING Saturday morning, February 25, 1956; offering a continuous program, special trips, school visits, general sessions, discussion group meetings, and special exhibits of textbooks and school supplies until Wednesday afternoon, February 29, 1956.

Make all hotel reservations NOW for Chicago with the Chicago Convention Bureau, 134 North La Salle Street, Chicago 2, Illinois.

Preconvention registration on Friday, February 24, 1956, 7:00-9:30 P.M., in the Conrad Hilton Hotel.

Convention Theme:

EDUCATIONAL LEADERSHIP—THAT PEOPLE MAY LEARN

Saturday, February 25

11:00 A.M.-GENERAL SESSION

Critical Issues in Secondary Education—Benjamin C. Willis, General Superintendent of Schools, Chicago, Illinois.

2:30 P.M.-GENERAL SESSION FOR JUNIOR HIGH SCHOOLS

Changing Functions of the Junior High School-Roscoe V. Cramer, Principal, West Junior High School, Kansas City, Missouri.

Working Together To Develop Better Programs—W. Earl Sams, Consultant in Secondary Education, State Department of Education, Sacramento, California.

Characteristics of a Good Junior High School-Robert K. Holloway, Principal, Central Junior High School, Euclid, Ohio.

2:30 P.M.—GENERAL SESSION FOR SENIOR HIGH SCHOOLS

Characteristics of a Successful Principal—David B. Austin, Professor of Education, Teachers College, Columbia University, New York, New York.

Career Opportunities in the Military Service for Our Gifted Boys-Arthur E. Boudreau, Colonel, USAF, Director of Admissions, U. S. Air Force Academy, Denver, Colorado.

Group V-How Extensive Should an Activity Program Be for Junior High-School Students?

Group VI-What Educational Program Is Needed in the Junior High School?

Group VII—How Can the Program of the Small High School Be Improved?

Group VIII-What Are Schools Doing for the Gifted Youth?

Group IX-How Can We Develop Mental Health, Physical Fitness, and Moral and Spiritual Values in Our American Youth?

Group X-What Are Needed Curriculum Changes in the Senior High School?

Group XI-Does the Principal Really Need a Student Council in His School?

Group XII—What Is the Role of the Principal in Curriculum Work?
Initiating the Program: What Initial Steps Are Involved?

Group XIII—What Is the Role of the Principal in Curriculum Work?
Improving an Established Program: What Are the Strengths and
Weaknesses of Your Program?

Group XIV-Planning the High-School Program of Studies.

Group XV-What Are Some Promising Administrative Practices in the Large High School?

Group XVI-How Is Democratic Administration Developed in a Modern School?

Group XVII-How Can We Recruit Better Candidates for Teachers?
Group XVIII-What Kind of Education for Home and Family Living
Is Needed Today?

Group XIX—What Is the Role of the Principal and the Staff in Planning the New School Plant?

Group XX—What Educational Program Is Needed in the Community College and Junior College?

Group XXI-What Is the Trend Toward Core Curriculum in the Senior High School?

Group XXII—How Can We Provide Adequate Counseling Services for Students in the Junior High School?

Group XXIII—What Promising Improvements Are Occurring in Organizing and Administering the Six-Year School?

Group XXIV-What Administrative Practices Contribute to Better Principal-Faculty Relationships?

Group XXV-What Are the Current Problems in Achieving Better School and College Relations?

Group XXVI-What Are Desirable Professional Standards for Principals?

Group XXVII—What Are Some Effective Public Relations Practices for Meeting Community Attacks on Education?

Group XXVIII—What Is the Role of the Wife of the Principal in the School Community?

6:00 P.M.-COLLEGE DINNER-Teachers College, Columbia University

New Projects Affecting Secondary Education—Ellsworth Tompkins, Assistant Secretary, National Association of Secondary-School Principals, Washington, D. C.

2:30 P.M.—GENERAL SESSION FOR JUNIOR COLLEGES

What Are Recent Trends in the Junior College?—Frank B. Lindsay, Chief, Bureau of Secondary Education, State Department of Education, Sacramento, California.

What Educational Program Is Needed in the 13th and 14th Grades?

-Leo Barry, Principal, Newton High School and Junior College,
Newtonville, Massachusetts.

6:30 P.M.-ANNUAL BANQUET

Addresses-William L. Shirer, Distinguished World Commentator and Author.

Kenneth W. McFarland, Nationally Known Educator and Inspirational Speaker; Guest Lecturer, General Motors Corporation.

Admission by dinner ticket only, \$5.50

Sunday, February 26

3:30 P.M.-VESPER SERVICE

The Mount Everest of Education-The Rev. Carl S. Winters, First Baptist Church, Oak Park, Illinois.

4:30 P.M.—RECEPTION. ALL ARE INVITED.

8:30 P.M.—GENERAL SESSION

Special music program to be presented by the Chicago Public Schools.

Monday, February 27

9:30 A.M.-GENERAL SESSION

The New Horizon in the Human Enterprise—John A. Schindler, Monroe Clinic, Monroe, Wisconsin; famous author of How To Live 365 Days a Year.

(One other speaker to be obtained.)

11:30 A.M.-VISITS TO SELECTED SECONDARY SCHOOLS

11:30 A.M.—SPECIAL LUNCHEON AND PUPPET OPERA; arranged especially for wives.

1:00 p.m.—Special Tours to Merchandise Mart, Museum of Science and Industry, Sears, Roebuck & Company.

2:15 P.M.-DISCUSSION GROUPS

Group I—How Can the Results of a Testing Program Be Used Most Effectively?

Group II—What Is an Effective Guidance Program in the Senior High School?

Group III—What Is the Present Status of Racial Integration in Public Schools?

Group IV-What Should We Do About Reading in the Senior High School?

Special program to be presented by the Proviso Township High School, Maywood, Illinois, and the Chicagoland Youth Orchestra.

Tuesday, February 28

9:30 A.M.-GENERAL SESSION

What Price the Fatted Calf?-Ruth Alexander, Distinguished Author and Lecturer.

Our Program for World Peace-Ralph J. Bunche, Under Secretary, The United Nations.

11:30 A.M.-VISITS TO SELECTED SECONDARY SCHOOLS

12:00 Noon-Special Luncheon for Junior High-School Administrators What a Superintendent Thinks Is Right About the Junior High School-Ernest G. Lake, Superintendent of Schools, Racine, Wisconsin.

1:00 P.M.—SPECIAL TOURS TO ADLER PLANETARIUM, MERCHANDISE MART; arranged especially for wives.

2:15 P.M.—DISCUSSION GROUPS

Group I-What Are the Problems of the Junior High-School Administrator?

Group II—How Can the School and the Home Co-operate in Reducing Delinquency Among Some Teenagers?

Group III-What Is the Present Status of Racial Integration in Public Schools?

Group IV—Can the Senior High-School Curriculum Be Functional and Traditional?

Group V-What Are Some Promising Administrative Practices for the Junior High School?

Group VI—What Are the Strengths and Weaknesses of the Junior High School Today?

Group VII—What Guiding Principles and Practices Are Needed for Building Better Programs of Classes and Better Assignments for Students?

Group VIII-What Are Secondary Schools Doing To Develop a Program for the Slow Learner?

Group IX-What Extra-Class Activities Should Be Included in the Senior High-School Program?

Group X—What Should We Do About Reading in the Junior High School?

Group XI-How Can the Student Council and the Principal Cooperate Most Effectively?

Group XII—What Is the Role of the Principal in Curriculum Work? Initiating the Program: How Do You Organize for Action?

Group XIII—What Is the Role of the Principal in Curriculum Work? Improving an Established Program: How Do You Make More Effective Use of Community and Other Resources? Group XIV-How Can Faculty Meetings Be Made More Professional?
Group XV-How Can Supervision Make Its Greatest Contribution to the Learning Process?

Group XVI-What Is the Present Practice of Issuing High-School Equivalency Certificates?

Group XVII—What Standards for Administration of Athletic Programs for Boys and for Girls?

Group XVIII—What Are Sound Policies for Controlling Non-Athletic National Contests and Activities?

Group XIX—What Is the Role of the Principal in Meeting Increased Enrollments?

Group XX—What Are Some Promising Developments in Outdoor Education for Secondary Schools?

Group XXI—What Kind of Guidance and Counseling Services in the Small High School?

Group XXII—What Constitutes a Minimum Testing Program for the Secondary School?

Group XXIII—What Are Effective Counseling Services for Students in the Senior High School?

Group XXIV—What Constitutes an Effective In-Service Teacher Education Program?

Group XXV-What Are We Doing About Spiritual Values and Character Education for Present-Day Youth?

Group XXVI—How May Effective Self-Evaluation of the Secondary School Be Organized and Administered?

Group XXVII—How Effective Is the Core Curriculum in the Junior High School?

3:30 P.M.—TEA AND FASHION SHOW AT MARSHALL FIELD & COMPANY; arranged especially for wives.

4:30 p.m.—Business Meeting for Members of the Association.

8:00 P.M.—No GENERAL SESSION SCHEDULED. Tickets will be available for leading shows in the Chicago theaters.

Wednesday, February 29

9:15 A.M.-VISITS TO SELECTED SECONDARY SCHOOLS

9:30 A.M.—DISCUSSION GROUPS

Group I-What Practices in School Discipline Develop Better Student-Teacher Relationships?

Group II—How Can Faculty Meetings Stimulate Professional Growth?

Group III—What Are the Important Legal Aspects of School Administration?

Group IV-How Can We Better Identify and Serve Non-Academic Youth?

Group V-What Are Effective Ways of Providing Financial Accounting for School Activities? Group VI-What Are Recent Trends in Junior High-School Organization and Administration?

Group VII-What Problems Concern Principals Most?

Group VIII-How Can the Principal Provide Effective Supervision in His School?

Group IX-What Should the School Do for Its Gifted and Talented Youth?

Group X-What Are Desirable Curriculum Changes in the Junior High School?

Group XI-What Are the Current Trends in Guidance Services in the Junior High School?

Group XII-How May We Make the Recording and Reporting of Student Achievement More Meaningful?

Group XIII—What Is the Role of the Principal in Curriculum Work? How Do You Put Recommendations into Operation?

Group XIV-What Are Effective Ways of Developing Good School Citizenship?

Group XV-What Procedures and Techniques Assure Good Schedules for the School and the Individual Student?

Group XVI—What Is the Role of the School in Work Experience and Student Placement?

Group XVII-How Can the School Handle the Teaching of Controversial Issues?

Group XVIII—How To Make and Utilize Follow-Up Studies of School Leavers?

Group XIX-What Are Some Promising Administrative Practices for the Senior High School?

Group XX-What Are Effective Ways for Evaluating the Secondary School?

Group XXI-How Can the School Develop Good School-Community Relations?

Group XXII-How Can the Principal Promote Professional Growth of the Staff?

Group XXIII—How May the Principal and the Faculty Promote Wholesome School Morale?

Group XXIV—What Are the Current Opportunities in Student-Exchange, Teacher- and Principal-Exchange, and Teacher-Fellowship Programs?

Group XXV-What Are the Imperative Administrative Issues in Consolidated Schools?

Group XXVI-What Vocational and Career Opportunities Are Available to Boys Entering the Military Service?

Group XXVII—What Educational Opportunities Can the School Offer to the Adults in the Community?

1:00 P.M.—GENERAL SESSION

Address-Leo Durocher, colorful figure in big-league baseball; now in TV.

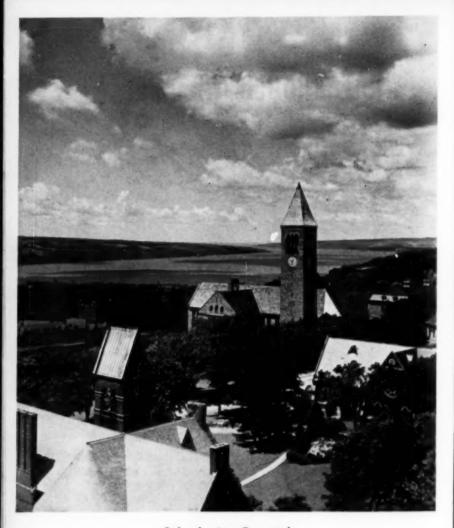
WHAT SHOULD WE EXPECT "Education?

By HOMER TOPE ROSENBERGER Ph.D., LL.D.

A book is, I think, in its best meaning an offer of friendship from him who writes to him who reads.

ALEXANDER MEIKLEJOHN

THE NATIONAL ASSOCIATION OF SECONDARY-SCHOOL PRINCIPALS
A DEPARTMENT OF THE NATIONAL EDUCATION ASSOCIATION
1956



Schools Are Essential

Ranging from small elementary school to the large university, schools are the chief centers of education in the United States. Supported by public and private funds, they enroll millions annually—presently about 37 million boys and girls. Most people in America receive the bulk of their basic education in schools. During the years following full-time attendance at school, they add to the foundation mainly by work experience and by a self-teaching process. Above is shown a small part of the campus of a world-famous center of learning—Cornell University, Ithaca, New York. This and other important schools make extensive education possible for most who desire it.

The Bulletin

OF THE NATIONAL ASSOCIATION OF

Secondary-School Principals

This Association does not necessarily endorse any individual, groups, or organization or the opinions, ideas, proposals, or judgments expressed in articles by authors, or by speakers at the annual convension of the Association, which are published in THE BULLETIN.

WHAT SHOULD WE EXPECT OF EDUCATION?

TABLE OF CONTENTS

Preface	11
Pre Chapter	13
Chapter 1. A Few Basic Thoughts and Queries	15
Of What Does Education Consist?	16
Decisions Must Be Made	20
The Financial Cost of Education	21
Is a College Education Worth What It Requires?	24
Not All Is Well	27
Education Cannot Cure All Evils	37
Idealism or Realism?	37
We Should Not Create Additional Problems, nor Fear Serious Ones	38
Unless Used, Education Is Without Value	38
Attitudes Are Important	39
Fostering Self-Respect During the School Years	40
Developing Judgment and Sustained Thinking	42
Vital Questions	45
These We Should Expect	45
Chapter 2. What Is of More Value than a Good Teacher?	48
Chapter 3. A Proper Setting For Learning	50
Chapter 4. What Kind of Curriculums Are Needed?	53
The Problem	55
Curriculums in Different Centuries	69
(Continued on next have)	

THE CONTENTS OF THIS BULLETIN ARE LISTED IN "EDUCATION INDEX"

Issued Monthly, September to May Inclusive

Capyright 1956 by

THE NATIONAL ASSOCIATION OF SECONDARY-SCHOOL PRINCIPALS

PAUL E. ELICKER, Executive Secretary

PAUL E. ELICKER, Editor WALTER E. HESS, Managing Editor

G. EDWARD DAMON, Assistant Secretary
WALTER E. HESS, Assistant Secretary
ELLSWORTH TOMPKINS, Assistant Secretary
GERALD M. VAN POOL, Assistant Secretary
1201 Sixteenth Street, N.W., Washington 6, D. C.

(Continued from previous page)

Curriculum Expansion in America	86
Strong Foundation for Learning	- 91
The High School Curriculum	100
The Core Curriculum	110
Special Curriculum for the Brilliant Student	114
Assistance for the Slow Learner	128
Education for the Emotionally Unstable	136
Educational Opportunity for the Physically Handicapped	148
The Liberal Arts Curriculum	160
Extent of College and University Offerings Today	177
Offerings for Out-of-School Adults	181
Curriculum Changes Should Be Based on Facts	193
Counseling Solves Many Curriculum Problems	193
Chapter 5. How Well Do We Read?	196
Literacy	197
Remedial Reading	198
Selectivity	201
Ear Plugs?	203
What About Underlining, Note Taking, and Prereading?	203
Evaluating the Printed Word	205
Improvement of the Mind	207
Chapter 6. The Ability to Express Oneself by Speaking and Writing Is Essential	210
Clear Thinking Necessary	212
Conciseness, a Priceless Gem	214
Well-Chosen Examples	216
Word Power	218
What About Use of Visual Media?	220
Respect for the Listener	221
Consideration for the Reader	222
Chapter 7. Safeguarding Life and Health	225
Safety Consciousness	226
Occupational Hazards	228
Personal Sanitation	230
Germ Consciousness	231
Observation as a Factor in Health	232
Siamese Twins	234
Concern for and Information About Public Health	240
Chapter 8. We Are Our Brother's Keeper	243
Responsibility for Others Has Posed a Problem Since Ancient Times	244
Independence?	247
North and South Pole	248
A Sense of Social Responsibility Requires Appropriateness	249
Characteristics of a Genuine Sense of Social Responsibility	250
Specific Examples of Social Responsibility	251
Teamwork	255
True Greatness	256
A Rich and Full Life	257

(Continued on next page)

(Continued from previous page)

Chapter 9. A Work-A-Day World		258
Those Who Work Are Entitled To Eat		260
Study Job Trends		261
Select a Worthy Field of Work for Which You A	re Fitted	265
Continue To Learn		267
Find Your Niche		269
The Importance of Getting Along with People		271
Pride of Workmanship		273
Has Thrift Been Forgotten?		274
Find Ways To Simplify Your Job		276
Socially Constructive Work Has Great Rewards		277
Progress Depends Upon Worthy Production		278
Chapter 10. Wise Use of Leisure Time		280
Life Should Be Joyful		282
What About the Other Eight Hours?		282
Competing Successfully with the Years		283
Types of Leisure Time Activities		286
Leisure Time Activities Can Be Intellectually Con	structive	289
Should One Have a Hobby?		289
Selecting a Hobby		290
Deciding Whether You Will Pursue Your Hobby	for Fun or Skill or Both	292
Travel as a Means of Adventure and Learning		293
The Wisdom of Reserving Time for Friends		294
Chapter 11. Constructive Self-Analysis		298
Franklin's Plan		300
Man or Mouse?		303
What They Say About You		304
How Good Are Your Interpersonal Relations?		305
No Adequate Substitute for Sincerity and Enthusi	asm	306
The Corrosiveness of Fear and Worry		307
The Power of Thinking		310
The Value of Decision		311
Self-Mastery Is Necessary		315
What About a Yearly Inventory?		316
Chapter 12. It Adds Up to This		318
Problems Ahead		319
Battle for the Mind		323
An Inventory Is Necessary		325
Constructive Living Rather Than Non-Constructive	e	327
Plato Rather Than Spencer		328
Global Appreciation		330
Schools Must Set the Pattern		334
New Horizons		336
Index		339
Requisites for Economic Literacy	Galen Jones	
	Baldwin Lee	349
News Notes		376

ILLUSTRATIONS

Schools Are Essential	Frontis Facing	
Children Need Schools of the Type Which Provide a Strong dation for Learning	Foun-	38
High Schools Have a Vast Influence on American Life		39
Could This Happen in Your Community?		78
Classrooms of This Type, Equipped with Movable Table Chairs, Can Be Adapted Readily to Meet the Requireme Many Kinds of Instructional Activity		79
Searching for Facts		114
The Use of a Globe Helps Provide a Proper Setting for the of Geography, History and Current Events	Study	115
Planned Experiments Help Develop Judgment and Sust Thinking	ained	152
Judgment Is Developed Through Practice in Judging		153
The High School Classroom Lends Itself to the Developme Leadership Qualities	ent of	192
Good Schools Develop Creativeness		193
When Handled Skillfully, Pupil-Teacher Planning of the S Day Is a Desirable Feature of Elementary Education	chool	238
"Practice Teaching" Is a Means of Training the Prosp Teacher	ective	239
A Hearing Test May Indicate Immediately Why a Child L Slowly	earns	276
Administering a Spatial Relations Test		277
The Possibilities Of Expanding Adult Education Are A Unlimited	lmost	330
Schools Can Be a Mighty Force To Eradicate Hatred and		991

PREFACE

The purpose of this volume is to place in the hands of the general public a book in lay language which will cause the reader to think about fundamental problems of education. The book is designed for the use of adults—particularly parents—from all walks of life, as well as for professional educators. The writer acknowledges that he advances views which may be regarded as rather idealistic in a money-centered era. But he makes no apologies for doing so. He believes that some emphasis in education needs to be changed in order to have education serve more fully its purpose and gain increased respect in general. Thus the seemingly idealistic approach in this book is one which is highly realistic.

To some readers the views set forth in these chapters may seem like meager expectations from education, while other readers may feel they are fantastically large. If the book challenges the thinking of its readers, the writer will feel well rewarded.

Each person who thinks much on the matter of education has personal views as to what should be expected of education. This is as it should be. If a large percentage of the adult population of a country will give serious attention to the question "what should we expect of education?" that country will probably attain excellent schools and a highly educated citizenry. It will maintain education at a desirable level as long as there is a proportionally large public interest in learning.

What shall the school teach? This is the curriculum problem. It is of such importance that it cannot be dismissed with a wave of the hand or treated in a few paragraphs. In order to face this problem squarely, chapter 4, on the curriculum, has not been compressed into a few pages. The chapter gives background and considerable detail concerning content and potentialities of various types of curriculums and how each can be put into operation to achieve extensive results. However, the 15 sections of the chapter are written in such way that, if the reader finds any one of them not pertinent to his or her current study, the section can be omitted without impairing the continuity of the book.

Four persons, each having a wide and varied experience in the field of education, have read the manuscript and made helpful suggestions. The writer is grateful to these persons:

Harry Franklin Weber, Ph. D., LL.M., Training Officer, National Security Agency, Washington, D. C.

Millicent Barton Rex, Ph. D., Head, Department of History, Madeira School, a private secondary school for girls, Greenway, Virginia.

John F. Brougher, Ed. D., Principal, Woodrow Wilson High School, Washington, D. C.

Walter E. Hess, M. A., Managing Editor, National Association of Secondary-School Principals, National Education Association, Washington, D. C.

In the selection of photographs to illustrate this volume, John Lloyd, M. A., Managing Editor of School Life (published by the United States Office of Education), was of much assistance.

For the convenience of the reader, a short statement presenting the principal ideas upon which this book is based is given in the form of a pre chapter. It follows this preface.

H. T. R.

Washington, D. C., February, 1956

Pre Chapter Principal Ideas Upon Which This Book Is Based

Any times we urge others to continue their schooling when we ourselves do not know just what to expect of education. This fact alone prompts systematic inquiry into what should actually be expected of education.

People's motives for gaining an education vary. It is sought in terms of job procuring requirements; as an escape from blue-collar occupations; as a means of securing a fortune; as a matter of social prestige, or, in the highest motive, as a means of making life full and satisfying in fundamentals. What should we expect of education?

In order to do a practical job of education in an exceedingly realistic and ever more complicated world, it is necessary to keep an eye on a few relatively simple but important qualities and to see how nearly we are

achieving them.

The ten qualities of education which are emphasized in this book complement and go beyond, rather than conflict with, the seven cardinal objectives of education. Those objectives, formulated by a committee of the National Education Association, were published in *Bulletin 35*, 1918, United States Bureau (now Office) of Education. They are: health, command of the fundamental processes (reading, writing, arithmetical computation, oral and written expression), worthy home membership, vocational efficiency, citizenship, worthy use of leisure, and ethical character.

The ten qualities of education which are emphasized in this book fall

into the following two groups.

With respect to schools and school systems we should expect these basic qualities:

- Teachers with teaching skill, high principles, vision and enthusiasm for educating.
- 2. An atmosphere for vital learning.

Flexible curriculums which come very close to meeting the current needs of all children, youth, and adults in the United States who are not mentally defective.

With respect to the person educated we should expect these basic qualities:

- 1. The ability to read, understand, and evaluate what is read.
- The ability to express facts and ideas reasonably well, both in speaking and in writing.
- 3. A keen awareness of safety and health hazards.
- 4. A many-sided sense of social responsibility.
- 5. Productive skills and a desire to use them.
- The ability to spend leisure time happily and without harm to self and others, and with little financial expense.
- The habit of objective self-examination of attitudes, conduct, and abilities, and correction of defects within reason.

The first three of these ten qualities can be used in measuring schools—any type of educational institution—elementary and high schools, colleges and universities, trade and technical schools, and the like. The next seven qualities can be used in measuring in a general, yet rather rugged and down-to-earth way, one's education, whether one has gone to college, or left school after being graduated from senior high school. To quite an extent these seven can also be used to measure the development of those men and women who have had very little formal schooling. Since some college graduates are virtually illiterate and some persons who have had almost no formal schooling are very well educated, the careful use of the seven qualities as a measuring stick produces some interesting results.

In this book a chapter is devoted to each of the above ten qualities expected of education. Chapters 2, 3, and 4 discuss schools from the standpoint of their being an important part of America's over-all social structure. As indicated on page 437, chapters 5, 6, 7, 8, 9, 10, and 11 are directed toward the adult American, as an individual. Those seven chapters treat the problem of how a man or woman may utilize and expand the education acquired during the years of full-time school attendance. Education is a life-long process. Success in life depends not so much on years of formal schooling and on degrees obtained as on using with discretion and discernment that which has been learned in and out of school during the school years and after.

A Few Basic Thoughts and Queries

Of What Does Education Consist?

Decisions Must Be Made

The Financial Cost of Education

Is a College Education Worth What It Requires?

Not All Is Well

Education Cannot Cure All Evils

Idealism Or Realism?

We Should Not Create Additional Problems, nor Fear Serious Ones

Unless Used, Education Is Without Value

Attitudes Are Important

Fostering Self-Respect During the School Years

Developing Judgment and Sustained Thinking

Vital Questions

These We Should Expect

How can we study intelligently a problem of long standing without first examining basic thoughts and queries concerning it?

A Few Basic Thoughts and Queries

Some of the basic thoughts of this chapter are touched upon lightly here and treated in much greater detail in the later chapters. Not all of the questions raised in this first chapter are answered here. Some of the questions raised at this point do not have satisfactory answers. Nevertheless, they are raised with the purpose of directing attention to problems which deserve careful consideration.

OF WHAT DOES EDUCATION CONSIST?

Education consists of "The impartation or acquisition of knowledge, skill, or discipline of character." This is a definition given by Webster's New International Dictionary of the English Language, Second Edition, Unabridged, published by G. & C. Merriam Company, 1955. Funk & Wagnalls New "Standard" Dictionary of the English Language, published in 1952 by Funk & Wagnalls Company, under "education" states the following:

. . . the systematic development and cultivation of the normal powers of intellect, feeling, and conduct, so as to render them efficient in some particular form of living, or for life in general.

Education, as understood to-day, connotes all those processes cultivated by a given society as means for the realization in the individual of the ideals. of the community as a whole. It has for its aim the development of the powers of man (1) by exercising each along its peculiar line, (2) by properly coordinating and subordinating them, (3) by taking advantage of the law of habit, and (4) by appealing to human interest and enthusiasm. It includes not only the narrow conception of instruction, to which it was formerly limited, but embraces all forms of human experience, owing to the recognition of the fact that every stimulus with its corresponding reaction has a definite effect upon character. It may be either mainly esthetic, ethical, intellectual, physical, or technical, but to be most satisfactory it must involve and develop all these sides of human capacity.

Education, as distinct from training, is the thing which makes life full in contrast to a meaningless vacuum or a treadmill existence. Education enriches life by increasing the power and inclination to reason. Education makes human beings of us. It cultivates our minds in a way that training alone does not do, although it must be recognized of course that the line between education and training is sometimes difficult to distinguish.

Education, then, consists of many overlapping objectives, processes, and results. Twelve are given here.

1. Education consists of a continuous process within a person, a process of change and development. One's education begins long before entering school. During the school years it continues almost every day in and out of classrooms. All the influences to which one is subjected during waking hours and all things observed are a part of the educative process, whether or not one is aware of it.

During the school years an individual may be influenced by daily outof-school experiences equally as much as by classroom teaching. Playing basketball, carrying newspapers to earn money, or being confronted frequently by a bully or gang on the way home from school may shape the thinking of many boys between the time they are ten and sixteen years of age. Children are influenced by what other children teach them, by what they see on television programs and in motion picture theatres and on the street in their community, and by what they see on the street and in stores down town.

Some of these out-of-school influences during the early school years have done much to shape the education of all of us. The way in which various employers treated us in childhood when we worked in late afternoons or on Saturdays and during summer vacations, and the discipline of work not connected with school helped shape our education.

After the years of full-time school, one's education continues (1) as a result of numerous contacts with other people, (2) through the solving of problems, and (3) through general and specialized reading. Education is a process which deals with all of life. It continues as long as life itself. Much needs to be learned after leaving high school, or after being graduated from college.

- 2. Education consists of developing an enlightened force which makes it possible for one to control his or her natural impulses as required by law. How different most of us would be without the advantage of education. Without education we would be on a low level, scarcely better than beasts. Education develops an enlightened force that curbs us from doing many things which nature prompts an uncivilized person to do. This enlightened force makes it possible for mind to rule over nature. To a large extent it restrains people from the use of violence. This enlightened force makes it possible for thousands of persons to live in close proximity to each other in at least an orderly way.
- 3. Education consists of teaching oneself or others to improve behavior above the minimum standards required by law. Education consists of changing a person's way of behaving, changing from one form of behavior to a better form. Ideally, education causes a person to refrain from behavior which is harmful even though not illegal.

John Ruskin, the versatile English philosopher and writer (1819-1900), contended that: "Education does not mean teaching people to know what they do not know. It means teaching them to behave as they do not be-

have." These words, taken from an 1869 lecture of his entitled "The Future of England," are found on page 502, volume 18, of *The Complete Works of John Ruskin, Library Edition*, published in London in 1905 by George Allen.

4. Education consists of directing to good purpose energies and abilities which otherwise might be left dormant or turned to selfish purpose. If our great men, such as Thomas Jefferson and Grover Cleveland, had had a different sort of education than they actually received they might have used their energy and their brilliance to plot against free government in America or to conspire in other ways against the welfare of many of their contemporaries. A large number of persons who are prominent in public life today would probably be unknown had they grown up in an environment which discourages education.

We may each have a philosophy of life, but education is necessary to shape that philosophy clearly and constructively. Furthermore, education assists greatly in putting a constructive philosophy into action. John Dewey (1859-1952), one of the greatest philosophers and educators ever produced by America, made the following statement:

If philosophy is for anything—if it is not a kind of mumbling in the dark, a form of busy work—it must shed some light upon the path. Life without it must be a different sort of thing from life with it. And the difference which it makes must be in us. Philosophy, then, is reflection upon social ideals, and education is the effort to actualize them in human behavior.

This statement by Dewey appears on page 1 of a volume entitled *The Purposes of Education in American Democracy*, published in 1938 by the Educational Policies Commission of the National Education Association.

5. Education consists of leading oneself or others to an honorable and satisfying philosophy of life and to suitable fields of work. The two parts of this objective are complementary. They go together as do one's left and right hand. Attaining this two-part objective causes an individual to find an appropriate niche in life, one for which he is suited and which brings happiness to him and makes his life useful. Guidance is a fundamental part of education. Guidance consists of skillful leading. This in turn is based on interpretation of facts concerning the person to be led and the environment in which he hopes to move as well as in the environment in which he now finds himself.

6. Education consists of preparation for meeting and solving real problems. Life is a succession of problems. Everyone in every generation has problems. It is the province of education to assist us to face problems both philosophically and realistically and to solve them intelligently.

7. Education consists of a broad foundation for constructive living in society. Since this is the case, a school should attempt wisely to shape attitudes and at the same time should encourage independent thinking. Unless a school carries on continuously these two somewhat diametrically

opposed functions, its performance is comparable to that of an automobile motor with several cylinders not functioning. Education is something vastly broader than teaching an individual to perform a specific job. Education includes more than is necessary to develop competence in laying bricks, installing piping systems, or in making blueprints or trial balances. Education is a broad foundation for constructive living, not in a vacuum but in society. Education should assist one to develop proper attitudes and to draw correct conclusions.

If we have a high and an intelligent motive in seeking education, after acquiring a fair amount of maturity, we may go to a great university. If so, we go not just to learn facts but to live in an inspiring atmosphere and at the feet of those who can assist us in developing habits, tastes, and a personal philosophy of life worthy of an educated person. At such a school one should acquire a broad foundation. This foundation should include the ability to think problems through on one's own initiative, and to learn how to make constructive use of one's abilities and opportunities.

- 8. Education consists of acquiring knowledge, skills, and attitudes which assist one in maintaining good health, a reasonable amount of economic security, and genuine happiness in life. When one lacks any of these three basic elements, life becomes a quest for those which are lacking.
- 9. Education consists of developing the ability to think logically, and with intellectual honesty. The person who weighs relevant facts carefully when thinking a matter through, rather than rationalizing in the name of thinking, has intellectual honesty. He meets a problem by considering objectively all of the pertinent facts which have come to his attention. In most instances he seeks diligently for pertinent facts, regardless of what they may indicate. Different is the case of the person who considers only certain of a group of facts before him, when he knows that all are pertinent to the problem at hand. When he then bends the selected facts so as to bolster wishful thinking, he has gone the second step beyond intellectual honesty. The combining of intellectual honesty with "straight thinking"—orderliness in reasoning—is an art which is practiced altogether too rarely.
- 10. Education consists of developing those cultural values which furnish intellectual and spiritual satisfaction. That pleasure resulting from an hour spent with a good book, and a half day spent in an unusual library, in an art gallery, or in a museum is one which furnishes intellectul and spiritual satisfaction to millions of people who have a fondness for knowledge. In many people these cultural values of education are rooted so deeply that they constitute a stabilizing force, even in the most critical periods of the individual's life.
- 11. Education consists of acquiring the ability to face discouragement, failure, or other crisis, with poise. It is desirable that education prepare one to succeed. However, since discouragement, failure, and personal

crisis are so common and so devastating, it is still more important that education instill in people the ability to keep on going in spite of these. In the modern competitive world, the ability to face with relative calmness any disturbing situation is a bulwark against mental breakdown.

12. Education consists of developing an over-all purpose to produce a world that will be better and happier than in the past. Advances in public administration, in pure and in applied science, in medicine, and in other fields, result from education. In large measure these advances are promoted with the object of decreasing the number and the severity of the problems facing mankind. Education is constructive rather than destructive. It strives to stamp out ignorance and prejudice. It opposes those elements which are harmful to man and directs its attention to those which make for improvement in general.

This list of twelve is somewhat overlapping and could be extended. It could not, however, include propaganda activities. "Educating" the public to use a certain kind of dentifrice, soap, breakfast cereal, floor wax, and the like is not education at all. It is propaganda, and only propaganda. Unfortunately, this use of the word education has come into wide use in recent years and cheapens the word education.

Today most persons in America receive their educational foundation mainly in elementary and secondary (high) schools and in colleges or universities and in out-of-school contacts during formative years. After the age of approximately 18 or 22 years this educational foundation is supplemented with self-education and specialized training. The self-education and specialized training are gained largely through (1) reading, (2) technical courses offered by recognized schools, (3) in-service employee training programs, (4) work experience, and (5) leisure time activities.

DECISIONS MUST BE MADE

As a nation we should expect of education results in proportion to what we invest in it in the way of thought, time, energy, and financial support. As individuals we should expect returns from our education commensurate with the thought, time, self-discipline, and energy we put into it during the days of formal schooling and during the period of growth and habit-fixing which follow school days. In brief, before specific returns from education can be expected, it is necessary for a nation, state, school district, or individual to do two things:

- 1. Formulate a philosophy of education.
- Decide to what extent money should be invested in education.(Like many other essentials, education is of great price and is worth what is put into it providing there is careful planning and efficient operation.)

From colonial times to the present, educational needs increased tremendously in America. Because of these needs, schools of many types came into existence until today schooling is available to everyone. As various social and economic surges influenced the American people, the curriculum of their schools changed. These changes usually came rather gradually.

Today the majority of men and women in the United States pride themselves on having many schools and on sending young Americans to them. Nevertheless, they do not actually require the schools to educate. Even with all of these schools and with millions of persons attending them annually, vital educating does not always result. This condition is reflected by the existence of a somewhat general consensus that the schools do not prepare one to handle adult responsibilities. Yet, an optimistic complacency prevails that somehow all will be well if children and youth are sent to school.

In large measure the American public tends to be more impressed by the size and expensiveness of school buildings than by the quality of instruction offered in classrooms, laboratories, and shops. In the United States the beauty of a library structure generally attracts more attention than does its collection of books and the extent to which the collection is used. As a consequence, much money is spent on schooling, although many who are in elementary school, in high school, or in college are deriving not nearly as much from the school years as they should.

Decisions on the part of a large percentage of adults in the United States as to (1) a philosophy of education and (2) the extent to which money should be invested in education can result in the improvement of schools. Widespread public interest in a problem such as education produces intelligent solutions. It also can produce the necessary financial support for schools and a desire for self-improvement on the part of adults.

THE FINANCIAL COST OF EDUCATION

As to the money cost of education, Thomas Jefferson put it this way: "... the tax which will be paid for ... [education] is not more than the thousandth part of what will be paid to kings, priests, and nobles who will rise up among us if we leave the people in ignorance." This he said in a letter of August 13, 1786 which he wrote from Paris to George Wythe, an eminent Virginia jurist. A letterpress copy (apparently made in Paris in 1786) of this letter is preserved in the Manuscripts Division of the Library of Congress. It can be found in volume 23 "Thomas Jefferson Papers," pages 3997-4000.

As early as Jefferson's time, the United States government realized the importance of education and the need to finance it. The Continental Congress passed two acts, one in 1785 and the other in 1787, known as the Northwest Ordinances. These established the policy of financing public schools in the new Northwest Territory through the sale of Federal lands.

The act of 1787, passed on July 13, was significant indeed. It was entitled "An Ordnance for the government of the territory of the United States North West of the river Ohio," and is commonly referred to as the Northwest Ordinance of 1787. To this fairly long act were appended six

articles which were to be considered as "Articles of compact between the Original States and the people and States in the said territory." These articles were to remain forever "unalterable," unless changed by "common consent." The third article contained the following challenging statement: "Religion, Morality, and knowledge being necessary to good government and the happiness of mankind, Schools and the means of education shall forever be encouraged." (Taken from page 340, volume 32, Journals of the Continental Congress, published in 1936 by the United States Government Printing Office for the Library of Congress.)

The framers of the Northwest Ordinance of 1787 were men of vision. That remarkable statute set up a workable and comprehensive governmental structure for the region which now forms the states of Ohio, Indiana, Illinois, Michigan, and Wisconsin, and part of Minnesota. The Northwest Ordinance of 1787 set the precedent for preparing our western territory for statehood. All of the vast domain from the Mississippi River to the Pacific Coast, except Texas and California were provided with a territorial government based on this act of 1787 which emphasized con-

tinuous encouragement of schools.

Since 1787 the United States has made great strides in financing education for its inhabitants. Today the land is dotted with schools. Almost every hamlet has a public elementary school, or school bus service which takes its children to a consolidated school. Where is there an American town of 5,000 population that does not have a public high school? Hundreds of cities, large and small, each have a college. America's thousands of schools, public and private, touch practically every family in the nation.

How much money do Americans spend for education? It is altogether possible that the amount spent in the United States for schools of all types during the school year ending June 30, 1955, was approximately thirteen billion dollars. This includes money spent on public and on private schools-on kindergartens, on elementary schools, on secondary schools, on colleges and universities, and on a few miscellaneous types of

schools such as residential schools for the deaf and the blind.

This estimate of thirteen billion dollars does not include the money which people spend on books, special excursions, and the like, for the purpose of learning "on their own." Nor does it include the value of the time

that they spend in acquiring education.

The most reliable statistics concerning amount of money spent in this country on all phases of education are those published by the United States Office of Education. The Biennial Survey of Education in the United States, issued by the U. S. Office of Education (in Department of Health, Education, and Welfare), and circulars issued by it in advance of the biennial volumes, contain statistics dealing with the cost of education.

Data published in 1955, in Section II, Chapter 4 of the Biennial Survey of Education in the United States, 1950-52, show that there were 1,832 institutions of higher learning in the 48 states and the District of Columbia during school year 1951-52. In that year those institutions had an income of \$2,562,451,000. Of this amount \$1,375,303,000 was received by the 641 publicly controlled institutions and the remaining \$1,187,148,000 by the

1,191 privately controlled.

Two studies published in 1955 by the U. S. Office of Education indicate that for the school year 1953-54 the average expenditure per pupil in public school systems was \$298 in cities of 100,000 or more population. In cities having from 25,000 to 100,000 inhabitants, the average cost per pupil was \$246. The per pupil cost in medium-sized cities, having 10,000 to 25,000 population, was \$233, and in small cities having a population range from 2,500 to 10,000 it was \$246. These data are given in Circulars No. 436 and 438.

Circular No. 459, issued in September 1955 by the U. S. Office of Education, gives preliminary statistics of state school systems for 1953-54. Circular No. 459 estimates that 28,819,000 pupils were enrolled in public elementary and secondary schools in the 48 states and the District of Columbia and that current expenditures for these schools amounted to nearly seven billion dollars—\$6.872.121.000.

In the calendar year 1954 the national income of the United States was almost \$299.7 million, according to table 1, page 9, of the July 1955 issue of Survey of Current Business, published by the United States Department of Commerce. With a current annual school expenditure of approximately thirteen billion dollars, less than four per cent of the national income is being spent on schools. Can that possibility be an excessive amount in an enlightened age?

Is the money that is put into education spent wisely? Sometimes yes, but not always so. For almost equal expenditures, one town has a good public school system and another town of similar size, and not far distant, has a poor one. Two colleges each having approximately the same number of students and spending about the same amount of money annually may

vary markedly in the quality of the educating which they do.

When quality is expected, its price must be paid. The money spent on education, privately, by individuals and organizations, or by government as a matter of public policy, regardless of amount, is a sound investment provided a number of factors are given adequate consideration. Among these are:

1. Proper matching of students with types and amount of educa-

tion to be offered

Careful selection, in-service training, and promotion of teachers
 Prudent use of funds for buildings, for laboratory and classroom

equipment, and for published materials.

Since the settlement of America by English speaking people in the 1600's, our educational systems, in what is now the United States, have grown rather steadily. For the most part they have been democratic. In turn, our schools have made the flowering of democracy in the United

States possible. They have helped mightily in assimilating millions of men and women from many lands into one great nation of 167,000,000 people, which far outstrips all countries in both national and per capita income. Statistical Papers, Series E, No. 1, October 1950, issued by the Statistical Office of the United Nations, Department of Economic Affairs, New York, is entitled National and Per Capita Incomes of Seventy Countries in 1949 Expressed in United States Dollars. Table 1 of that publication shows the 1949 national income of the Union of Soviet Socialist Republics (Russia) to have been \$59,500,000,000 and its per capita income as \$308, as compared with a national income of \$38,922,000,000 and a per capita income of \$773 for United Kingdom (Britain) and \$216,831,000,000 and \$1,453 respectively for the United States. In the over-all picture, schools in the United States have been worth as much or more than the money they have cost.

IS A COLLEGE EDUCATION WORTH WHAT IT REQUIRES?

A book entitled They Went To College gives a fairly recent picture of college graduates in the United States. Written by Ernest Havemann and Patricia Salter West, it was published in 1952 by Harcourt, Brace and Company. It is based on questionnaire replies in 1947 from 9,064 graduates of colleges, universities, teachers colleges, professional schools, and technical institutions in this country. The median age of these graduates at the time of returning the questionnaire was 36.9 years. Four out of each ten were women.

In general, the book and its many charts give one the feeling that a college education is worth what it requires. For example, the book indicates that as a group these 9,064 graduates were exceedingly stable and were fortunate as to earnings. In 1947 they were receiving annually more than twice as much money as the \$2,200 median yearly income, then, for all American men. Yet, the book has little to say about such fundamental things as who should go to college, or what the college should teach. Chapter 21, entitled "The Dissatisfied Graduates Speak," is but seven pages in length. The book may leave the impression with many readers that undoubtedly a college education is worth what it requires. Let us look a bit deeper into this question: "Is a college education worth what it requires?"

Higher education is expensive. It is expensive to both the school and to the student. Comparatively few schools charging tuition and other fees receive enough return from these sources of income to meet current expenses. Students preparing themselves for a specialized field as law, medicine, theology, teaching, engineering, and the like invest years of their time and much money before starting to earn money. These years of study penalize the student by placing on him a burden of current expense and a shortening of the number of years during which he can later earn an income.

In thousands of cases an individual does not receive a good return in dollars and cents for his or her extended investment in education. Even the greatest scholars and scientists generally receive only a modest money return and in old age may be awarded a Nobel or Pulitzer prize. Self-centered cleverness and crafty finesse take one farther in many instances than sound education and its honest use.

After being graduated from college, many men and women become dissatisfied and then turn sour on life. They feel that they are not obtaining sufficient benefit from their education. Men chafe under the daily routine of their jobs. Housewives ask if they went to college to be tied to a dishpan. All of us, from the President of the United States to the most menial fulltime worker in the land, are confronted with much routine. The grace with which we accept routine, together with the intelligence we use in analyzing routine so as to eliminate the unnecessary and handle the remainder well, exhibit the extent to which we are using our education. If we are the type that should have gone to college and if we put to use the knowledge and abilities acquired during the years spent there, we will find how to rise above the routine and make a contribution. Success is not dependent so much on the prestige of one's job, or salary, or social position on and off the job, but rather on the challenge that both job and life in general presents. To some they present little challenge, to others very much. A person with a college education should be in a good position to find challenges, accept them, and handle them honorably and efficiently. The housewife, quite as much as the office worker, farmer, or engineer, can make excellent use of her education almost daily if she will try consistently in and out of her home to do so.

The situation of the dissatisfied college graduate is a perplexing one, for a college education should bring satisfactions rather than dissatisfactions. If the dissatisfied graduate is the kind of person who should not have taken either a technical or a liberal arts curriculum, yet was permitted to be graduated from college, there is likely to be a problem of adjustment. If he (or she) lacks the necessary intellectual ability to handle jobs of the type to which college graduates aspire, he may become very resentful. The problem of adjustment can arise out of the graduate's awareness of his (or her) rather limited capacity, or because of his being unaware of it.

Many who are graduated from college lack some of the fundamental characteristics of the educated person. This is an alarming fact. It points to defects in entrance qualifications, caliber of instruction, and standards for graduation. If a college student lacks both scholarship and leadership, he or she should not receive a college diploma. It is definitely possible to tell whether or not a college senior possesses either of these characteristics in reasonable amount. Numerous persons almost totally lacking in both have received college diplomas.

To what extent do colleges and universities in the United States develop broad understanding and latent qualities of leadership in the persons whom they graduate? Quite a few college graduates are lacking in judgment. Some are inclined to be highly theoretical and to lean heavily on the printed word. At the same time these particular graduates are inclined to be short on observation and interpretation of activities, and reactions of people. Many college graduates are not inclined to objective self-examination with a view to improving themselves. These men and women are likely to be among those who should not have been admitted to college or who should not have been graduated. With better screening at time of entrance and during the college years there would be fewer dissatisfied graduates.

This raises the question as to just who should be encouraged to go to college. There are millions of blue-collar jobs in the United States which must be performed, some requiring almost no preparation, others requiring much technical skill. A great number of blue-collar jobs are exceedingly attractive in various ways. Millions of youth do not want to remain in school beyond the high-school level. A considerable number of large industrial firms provide excellent in-service training programs. These programs appeal to many young men more than does the thought of college instruction, since the in-service training deals with specific, tangible skills, the mastery of which assures promotion. Many jobs, blue-collar and white, require so little education that they fail to hold the interest of a typical college graduate for more than a few months at most. No employer wants a dissatisfied worker. Therefore, unless a high-school boy shows interest in going to college, and scholastically stands in the middle or upper third of his class, he probably should not be urged to go to college.

Should a girl go to college? The answer does not lie in the following questions: "Are her parents college graduates?" "Will she probably marry in her early twenties, and therefore, not need a college education to earn a living?" "Will a college education help her greatly to 'marry well'?" Instead, the answer lies in whether or not as a housewife, or as one on a payroll job, or in business for herself she is likely to make good use of a

college education.

To what extent should admission to American colleges and universities be limited to those who make superior grades in high school or obtain an enviable score on a battery of intelligence and achievement tests? What can be done to screen out those who go to college merely for pleasure or to uphold the family reputation? What can be done to make four years of college study possible for all youth in the United States who have pronounced thirst for knowledge and appropriate intellectual capacity? Would a college education yield more to the individual and to the nation if a plan were devised for providing all or at least part of the four years of college work at a slightly more mature age than at present? In the light of experience gained since 1946 through instructing men who returned from the armed services and continued their education, would it be practical to encourage any considerable number of youth to enter full-time employ-

ment for a few years between the time of being graduated from high school and matriculated in college? If so, which youth should be urged to delay and which to matriculate immediately after completing high-school work? Also, how can standards be raised in those colleges which keep such close watch of tuition and other student fees as to retain and graduate persons who do not meet reasonable standards of scholarship?

It must be recognized that we cannot afford to diminish our emphasis on education and that in a democracy all who can benefit noticeably from education beyond the junior or senior high-school level should have an opportunity to continue in school. Nevertheless, it is folly to strive to send a larger and larger percentage of the population to college with the thought that doing so will build a better nation. Many who go to college are not suited intellectually to college curriculums and are unhappy in college. They do not benefit from college in proportion to the effort they put into

it, nor in proportion to the money cost of a college education.

The sacrifices which many parents make to send their children to college are readily noticeable. We are aware of the expense to which the public goes in maintaining elementary and high schools for almost everyone in America to the age of sixteen years. We are also aware of the public expense in maintaining agricultural and mechanical colleges, state teachers colleges, and state universities for almost any high-school graduate who clamors for admission. When we ponder over these costs and how little benefit is received by some parents who pay a substantial part of the bill and by many persons who have had a greater number of years of formal schooling than they were fitted for, it is realized that our point of view which leads to enthusiasm for educating almost everyone into positions of leadership or specialization needs rethinking. Nevertheless, we must not go to the other extreme and lose sight of the fundamental value of a college education, nor attempt to restrict college entrance to a small percentage of the population. Let us have faith in the extra years of study, for those who can profit markedly from higher education, even though advanced learning is not always appreciated and even though it may not always be a good investment from the standpoint of dollars and cents. Many personal satisfactions resulting from a college education to those who can profit noticeably from it do not show up in the statement of annual earnings. Furthermore, society benefits from higher education. The person who has been graduated from college will in most instances be more useful than if he or she had not gone to college.

NOT ALL IS WELL

From the time a child enters elementary school until he completes high school he learns an astonishing number of things. Learning to read and write, to do simple arithmetic, securing something of a concept of history, and gaining familiarity with principles of science are all a part of the individual's development during these years, and they are accomplishments

of major proportions. This achievement of the pupil reflects favorably on our education systems.

American schools have probably done a better job than have schools in any other country during the last half century, considering the tremendous amount and variety of instruction made available in the United States. Our schools are of such vital importance that it is our duty to study them continuously with a view to making them even more useful than they now are.

The Regents' Inquiry Into the Character and Cost of Public Education in the State of New York is a series of significant volumes which appeared between 1938 and 1941. The "Inquiry" was one of a number of surveys of American education that have been made in recent years. In 1945 a Harvard Committee published a report in the form of a book entitled General Education in a Free Society. This carefully prepared volume, like the Regents' Inquiry volumes, shows that curriculum and other school problems need attention. Life magazine devoted its October 16, 1950, issue to education, emphasizing that schools in the United States face a crisis. This special issue on education contended that we are failing to produce truly educated men, are deficient in training teachers who are masters of the art of teaching, and are failing to stem a tide of intellectual and spiritual poverty. The October 16 issue infers that our schools will form our common mind and determine whether or not humanity will be free.

Among the problems which need immediate attention in American schools, as the present writer sees it, are the following six:

- Improvement of personnel, buildings, and equipment through increased appropriations for education.
- Ascertaining curriculum changes in terms of student and society needs.
 - 3. Adherence to reasonable standards of scholarship.
 - 4. Avoidance of complicating the instructing function of parents.
 - 5. Teaching self-discipline.
 - 6. Teaching morality.
- 1. Improvement of personnel, buildings, and equipment through increased appropriations for education. Many school administrators and most teachers are paid comparatively low salaries. Chapter 2, "Statistics of State School Systems," of the Biennial Survey of Education in the United States, 1950-52, published by the U. S. Office of Education, shows that the average salary of all teachers, including supervisors, principals, and other instructional staff, in public elementary and secondary schools in the United States for the school year 1951-52 was \$3,450, with Mississippi paying the lowest average, \$1,617, and New York the highest, \$4,591. (See Table 24, on page 70). These averages include many persons with a masters degree and thousands of persons who have been teaching for fifteen or more years since being graduated from college.

In a considerable number of instances high-school teachers carrying a full teaching load are burdened with numerous clerical details and with many extraclass (extracurricular) and community activities. College teachers are paid to instruct but receive recognition mainly for research and writing which they can do only by neglecting their health or their students or both. In most instances the salaries for teaching in elementary school, high school, and college are too low. Frequently teachers are asked to carry a work load that is heavier than it should be.

Low salaries and unfavorable working conditions do not make for improvement of personnel. On account of its comparatively low salaries, and to some extent because of its working conditions, the teaching profession does not attract, or fails to hold, much of our best leadership. Teachers who are poorly paid are likely to have low morale. A dissatisfied teacher has a destructive rather than a constructive influence on pupil or students

and can scarcely do a good job of teaching.

In order to carry on the type of program in school which is needed, special services must be provided. These require additional personnel such as guidance counselors for all students, remedial reading instructors for those who have difficulty in learning to read, and special teachers for brilliant students. Persons acting in these capacities are found in many school systems, but frequently they are spread so thin that they cannot give service worthy of the name. For example, one faculty member in a senior high school of 1,000 students may spend half-time teaching and half-time providing the so-called organized counseling service for the entire student body! The national picture, however, is a bit brighter than this. Although no one knows just how many persons are spending full-time or at least half-time as counselors in junior and senior high schools in the United States, it appears that in November 1955 there were approximately 7,400 persons serving as counselors for half-time or more, in public secondary schools-grades seven through twelve-in this country, and 10,000 devoting less than half-time to this specialty. In large secondary schools a full-time counselor may normally be found to have a case load of at least 400.

Many school buildings in the United States are old and in a deplorable condition. A considerable number of them are fire hazards. Thousands of our school buildings, both old and new, are overcrowded. American School Buildings, 1949, is the title of the Twenty-Seventh Yearbook of the American Association of School Administrators. It stated on page 5 that the "immediate need for new school buildings is overwhelming" because of increasing school population and necessity for "replacing unsafe and outdated structures that were kept in use through nearly twenty years of depression and war." A table on page 11 of the volume shows that during the period 1910-1919 sixteen cents of the school dollar were spent for buildings; in the decade 1920-1929 nineteen cents, during 1930-1939 ten cents, and during 1940-1945 five cents. In view of the rise in population of the United States during the last ten years and the deterioration of old struc-

tures, it can be seen at once that increased attention to school buildings is essential.

The Annual Report of the United States Commissioner of Education for the fiscal year ending June 30, 1950, maintained that every state was facing a "grave shortage" of school facilities, and that a minimum of a half million elementary and secondary schoolrooms were needed! (Pages 10-11).

In Title 1, Public Law 815, approved September 23, 1950, the 81st Congress directed that a survey be made of public elementary and high school facilities. As a result, the School Housing Section of the United States Office of Education issued a Progress Report in April 1952 which consists of an inventory of existing school facilities in 25 states. Page 53 of the report indicates that 35 per cent of the elementary- and high-school pupils in the 25 states were housed in satisfactory school plants, 44 per cent in fair, and 21 per cent in unsatisfactory. These figures were based on ratings of school buildings as to structural stability, fire safety, and the like. The ratings were made by state and local survey staffs.

The Annual Report of the U. S. Office of Education for 1953 stated that the United States was then short "more than 340,000 public elementary and secondary school classrooms." It asserted that "building deterioration and obsolescence will create the need for more than 400,000 classrooms by 1960." It also stated that "Three classrooms out of every five are overcrowded. One out of every five pupils across the country is going to school in a schoolhouse which does not meet minimum fire safety conditions." (Page 165, Annual Report of the U. S. Department of Health, Education, and Welfare, 1953).

There has been a sharp difference of opinion as to how many new class-rooms actually are needed for America's public elementary and secondary schools. Among recent important estimates is one by U. S. Commissioner of Education, Samuel M. Brownell, made before the Committee on Education and Labor, U. S. House of Representatives, on March 29, 1955. Commissioner Brownell indicated that on the basis of estimates from the states there is need for constructing 476,000 new classrooms by September 1959 in order to give full account "to enrollment increases, to reduction of overcrowding and double sessions, and to replacement of unsatisfactory schools." (Page 6c, STATEMENT by Oveta Culp Hobby, Secretary of Health, Education, and Welfare and Samuel M. Brownell, U. S. Commissioner of Education, Before the House Committee on Education and Labor, in Support of H. R. 3770, H. R. 3812, and H. R. 3824, March 29, 1955).

In addition to the need for new school buildings, the seats or desks and the laboratory and vocational shop equipment, in a considerable number of America's existing public schools, require modernization so as to make comfortable those who attend school and to promote up-to-date learning. 2. Ascertaining curriculum changes in terms of student and society needs. Like clothes for a growing child, the school curriculum becomes unsuitable unless revised almost constantly. The educational needs of one generation are somewhat different from those of the generation immediately preceding or immediately following. Many innovations are added to the curriculums of high schools and colleges from time to time but to a larger extent the curriculums tend to remain relatively unchanged. In a measure this creates a hodge-podge of antiquated offerings and untried frills. Sometimes the combination functions reasonably well, sometimes not.

Perhaps in high school we are giving boys and girls much which they will not need and failing to give them what they can use in jobs lying ahead. The curriculum problem is broader than it may seem. It requires continuous research in such matters as job opportunities, job requirements, interests, and abilities of various types of students in high school, and kinds of services which schools can offer that are necessary to prepare students to meet, on and off a future job, the every-day problems of life. How well does the curriculum of the junior and of the senior high school challenge students and engage them in wholesome school work? How well does the curriculum of the junior and of the senior high school help students to understand the problems which men and women face in their 20's?

There is still need for the fundamentals—mathematics, history, English, and the like—in high school, whether or not a boy or girl expects to go to college. However, if the student thinks he is not receiving in high school what he needs, he is likely to slow down on studying, and perhaps leave school. Careful revision of the curriculum is necessary but it ought to be accompanied by a clear explanation to the student as to electives available and why each part of the curriculum deemed suitable for him will be of value to him as an individual.

To what extent should high schools concentrate on general education and to what extent on vocational education? How can an appropriate balance be struck between general education on the one hand and training on the other in colleges and universities? Decisions concerning curriculum changes need to be made now in most American high schools and colleges,

and plans developed for almost continuous revision.

3. Adherence to reasonable standards of scholarship. In the United States we demand education yet place little value on thoroughness of learning. This is a serious and a surprising conflict. Innumerable elementary and high schools in our country promote nearly all pupils at the end of each year or semester whether or not their work has been satisfactory. This develops slovenly habits. At the college level the situation is more favorable but great variation in scholastic standards is found between different departments in the same college or university and between different institutions. Unless a reasonable standard of achievement for passing from

one grade to the next in school and for passing individual courses is set and adhered to, shoddy work and an easy philosophy are encouraged.

Adhering to reasonable scholastic standards in schools becomes a difficult matter when a large percentage of the population attends school. Under compulsory education something must be sacrificed. It is impossible to adhere to as high a scholastic standard under compulsory education as under more selective conditions because many who cannot meet a high standard are forced to remain in school. If much pressure for high scholastic standards is applied in America's public secondary schools, the rate of failure, and also of drop-out, will be large. If the standards of scholarship sink to a low level, the school will not achieve its purpose. This matter of adhering to reasonable standards of scholarship is a fundamental problem in American education, in the elementary school, in high school, and in college; it calls for a diversified curriculum in order to meet the varied needs of school youth.

Establishing chapters of the National Honor Society in a senior high school, and of the National Junior Honor Society in a junior high school, is one way to improve standards of scholarship in a public school system. The National Honor Society, established in 1921, and the National Junior Honor Society, organized in 1929, are directed by the National Association of Secondary-School Principals, in Washington, D. C. These honor societies can stimulate scholarship, and can also tend to develop character, leadership, and a spirit of service in senior and junior high-school students. The administrator of a senior or junior high school of approved grade finds no difficulty in establishing a chapter in his school if he cares to do so. Yet he should be aware of the fact that the establishing of a chapter of the Society will not be a cure-all and may be a gesture similar to that of giving gold stars to elementary-school pupils for good work.

What about home work for junior and senior high-school students? There is a strong trend of thought which looks with disfavor on requiring students in public schools to spend time at home completing reading and other study assignments. Home work has been looked upon as the "K. P." duty, the chore, of education. Many parents feel that it is themselves who are "home worked." Frequently, home work for junior and senior high-school youth results in punishing the parents. Nevertheless, home work helps parents to keep in touch with what their children are learning in school. The evening assignments can be a valuable means of developing the individuality of the student and disciplining his mind.

The problem of home work diminishes when teachers do co-operative planning among themselves. This avoids the situation of a student receiving tremendous assignments from one teacher and almost none from another, or receiving very large assignments from all his teachers at the same time. In a large high school, this co-operative planning becomes difficult; however it can be done.

If children and youth in elementary and secondary schools, and students in college, are already receiving the highest grade on regular work, what incentive exists? Should they be given additional work? Frequently this can be arranged readily. Should grading be adjusted to capacity? Sometimes this is very difficult to do.

4. Avoidance of complicating the instructing function of parents. Parents have a large responsibility in the education of their children. Education begins at home. Even so, much of the education process necessarily must be carried on in the school. The junior and senior high schools should avoid creating supercilious and irresponsible attitudes in youth which complicate for parents their function of instructing.

In many respects we educate our children quite intensely in junior and senior high schools through classroom work, study assignments, and extracurricular (extraclass) activities. The early teen age is a difficult one with which to deal and perhaps not a great amount of stability and studious concentration should then be expected of a boy or girl, even though this is an important formative period of life.

With all of the intensity of education, many children in their early teens receive nothing in school which assists parents to continue teaching them such basic things as keeping their necks clean, answering the telephone courtesously, and developing a wholesome attitude toward performing useful work at home. This lack, and a species of attitude in children in their early teens varying from extreme irresponsibility to indifference and contempt in matters other than school, causes thousands of parents to question the value of the school program.

5. Teaching self-discipline. In gaining education a person should gain common sense. Common sense dictates that one should acquire self-discipline. The person who lacks self-discipline completely, is dangerous. The one who possesses it in only small measure is a potential danger to the community in which he lives, or to humanity generally.

Upon leaving school to earn a living, whether leaving after completing high school or upon being graduated from college, a rather large percentage of young men and young women are short on self-discipline. Nevertheless, some of their classmates have disciplined themselves in a mature and balanced way. These facts point a finger of commendation at some parents and youth and a still larger finger of neglect at teachers and school administrators.

In American schools there is too little discipline of the type which teaches people to think, to be generally responsible, and to perform specific tasks well. Slave-driving and a rigid discipline of orderliness and quietness in school are not necessary to inculcate this self-discipline. Leadership of a type which wins the respect and admiration of high-school and college students needs to be used in the classroom. Courage is required to face and attempt to check a general trend toward low standards. School

administrators and teachers must have the will to do this difficult job rather than sidestep it.

Little in the way of systematic and consistent constructive effort can be expected from the undisciplined adult. Harry Emerson Fosdick, on page 206 of his book entitled Living Under Tension (Harper and Brothers, 1941), states the following: "No horse gets anywhere until he is harnessed. No steam or gas ever drives anything until it is confined. No Niagara is ever turned into light and power until it is tunneled. No life ever grows great until it is focused, dedicated, disciplined."

Self-discipline means self-control. Self-discipline of a useful type springs from the forming and following of ideals. Adjusting means to worthy ends, and rejecting impulses when they are contrary to ideals, furnish experiences from which the highest type of self-control develops. Neither propaganda nor edict can produce a high type of self-discipline. Therefore, teachers should do much over the years, especially by way of example, to help children and youth, from the time of entering elementary school until being graduated from college, to form and follow ideals. Self-discipline is one of the chief characteristics of an educated person. It is a quality which schools can and should assist one in securing.

6. Teaching morality. The need for teaching morality is brought out sharply in the following prayer which was offered in the United States Senate on January 26, 1948, by the late Peter Marshall, then Chaplain of the Senate:

O God our Father, we pray that the people of America, who have made such progress in material things, may now seek to grow in spiritual understanding.

For we have improved means, but not improved ends. We have better ways of getting there, but we have no better places to go. We can save more time, but are not making any better use of the time we save.

We need Thy help to do something about the world's true problems—the problem of lying, which is called propaganda; the problem of selfishness, which is called self-interest; the problem of greed, which is often called profit; the problem of license, disguising itself as liberty; the problem of lust, masquerading as love; the problem of materialism, the hook which is baited with security.

Hear our prayers, O Lord, for the spiritual understanding which is better than political wisdom, that we may see our problems for what they are. This we ask in Jesus' name. Amen. (Congressional Record, January 26, 1948, page 495).

The disciplining of oneself is reflected in moral and discreet living. The inculcation of morality and the molding of character in general are legitimate and important functions of the school. Frequently these functions are neglected, avoided, or handled in a shabby way due to legal restrictions, the attitude of school administrators and teachers, and the attitude of the community. Not to any remarkable extent do our schools civilize in such way as to cause us to deal with others on a high plane.

Our public elementary and high schools and most of our colleges and universities do not express opposition to morality teaching. They just do virtually nothing about it. During the school years one is taught many subjects five days a week, and almost no attention is given to moral teachings. A small percentage of pupils receive an hour or two of religious instruction per week outside of school. All in all, much instruction is crowded into the lives of young Americans, but little of it concerns morals. To some extent, therefore, students cannot be held responsible for deducing that other instruction is much more important than the meager moral teaching which they receive in school.

The teaching of morals in such a way as to lead to moral conduct is a matter worthy of much attention at home and in school. A major purpose of education, after all, is one that is moral in nature—to raise people toward high levels, even if only raising them ever so little. Ralph Waldo Emerson said that "Civilization depends on morality," and that "the true test of civilization is, not the census, nor the size of cities, nor the crops,—no, but the kind of man the country turns out." (Pages 30 and 34, Society and Solitude, New and Revised Edition, published by Houghton, Mifflin and Company in 1898).

It is recognized that in teaching morality in public schools there is a problem of sifting out the dogma of individual sects. Even so, the problem of teaching in school the commonly accepted essentials of morality is not insurmountable. This problem deserves more attention than it has received in the United States in the last three decades.

During the school years, persons should be taught that a sense of justice will hold them responsible to themselves for their actions. Schools which emphasize that everyone has a personal responsibility for ordinary respectability, such as the use of decent language whenever speaking or writing, deserve commendation. So-called tolerance can go too far.

Honesty, perhaps more than anything else, is the basic element of morality. We dare not put a premium on dishonesty, yet this has often been done.

Failing to keep a promise may constitute dishonesty, which varies from a minor to a major offense. A general lack of sincerity in dealing with others corrodes a sense of honesty. A desire to circumvent the spirit of the law and a search for quick dollars endanger the strength of one's moral fiber. These characteristics—a lack of sincerity, a desire to circumvent the spirit of the law, a search for quick dollars—constitute a blight which seizes many people. It is a blight which causes men and women to engage in conniving of various types and in sharp practices which frequently are not criminal but which usually are revolting and contrary to decent standards. The "fixing" of parking tickets, the padding of insurance claims, the lifting of silverware in restuarants, the appropriation of towels in hotels, and cheating on income tax dwarf one's sense of honesty. Worse yet, these compromises with morality are noticed by one's children and tend to cause them to look upon such actions as being acceptable. Even

so, teaching morality in schools-elementary schools, secondary schools,

and colleges-can have good effect.

The teaching of morality presents a difficult problem and requires an understanding of human nature. The problem of teaching morality varies somewhat from school to school, and from decade to decade. The many books which have been published on the subject of character education and the numerous bulletins issued by school systems, dealing with the problems of teaching morals, will not necessarily provide specific answers for any school administrator or teacher. Yet a perusal of published works related to the teaching of morals is helpful. The extensive piece of research done in this field by Hugh Hartshorne, Mark A. May, and Frank K. Shuttleworth, published in three volumes by the MacMillan Company, 1928-1940, under the title Studies in the Nature of Character, provides basic information. A book by Harry C. McKown, entitled Character Education, published by McGraw-Hill Book Company, Inc. in 1935, also contains a wealth of pertinent data.

Morality need not be taught apologetically. It can be taught positively, by example, and by emphasizing a socially constructive approach to life, in contrast to a selfish approach.

We should have personal standards of conduct and adhere to them rather than form the habit of accepting everyone's ideas. The teaching of morality in school will aid men and women in setting their personal standards and in adhering to them.

The continuous condoning of our own deviations and the deviations of others from reasonable standards of conduct is harmful. Making excuses repeatedly for such deviations takes us farther along a path of gradual degeneration and does not promote stability or happiness, but points to the need for teaching morality in schools.

In a series of articles entitled "The Moral Threat to America," the June 1951 issue of *The Reader's Digest* quoted United States Senator J. William Fulbright as follows: "Democracy is, I believe, more likely to be destroyed by the perversion or abandonment of its moral principles than by armed attack from Russia." (Page 3). These words are worthy of serious reflection.

Alexis Carrel, on pages 130-131 of his book entitled Man, The Unknown (Harper and Brothers, Twenty-Sixth Edition, 1935) includes the following thought-provoking paragraph:

In modern civilization individuals whose conduct is inspired by a moral ideal are very seldom encountered. However, such individuals still exist. We cannot help noticing their aspect when we meet them. Moral beauty is an exceptional and very striking phenomenon. He who has contemplated it but once never forgets its aspect. This form of beauty is far more impressive than the beauty of nature and of science. It gives to those who possess its divine gifts, a strange, an inexplicable power. It increases the strength of intellect. It establishes peace among men. Much more than science, art, and religious rites, moral beauty is the basis of civilization.

"Education and Morals" is the theme of The Year Book of Education, 1951, published in London. The person who believes that schools can do nothing about the teaching of morality may obtain a new viewpoint by consulting that British volume. The Northwest Ordinance of 1787 was referred to in this chapter, in the section dealing with the financial cost of education. That ordinance pointed to the continuous need for schools and emphasized the blending of education and upright living. Can the desirability of such a combination be denied? Unless the teaching of morality and the molding of character in general are emphasized in schools and carried on wisely, an optimum result from the school program cannot be expected.

EDUCATION CANNOT CURE ALL EVILS

The public expects too much of education systems and too much of the educated person. The public expects too much of education in general although it expects too little in the way of specific fundamentals. Many parents think the school can accomplish the entire process of education and relieve them of the responsibility of instructing their children. Industry expects the schools to fit young men and women to a great extent for employment. Educators and highly educated persons in public life are

expected to cure many evils.

Theoretically, education should solve all problems. Owing to forces of human nature, however, education does not function at the optimum. There are weaknesses in our public and in our private education systems, at all levels and in various types—elementary and secondary schools, colleges and universities, and technical, trade, and correspondence schools and schools for the deaf, blind, and crippled. Regardless of how effectively a particular school or school system operates, one can find a weakness about which to quibble. There is a tendency to magnify the weaknesses of our education systems and to overlook the productive results of education.

IDEALISM OR REALISM?

Should we expect education to be realistic or idealistic? Should it yield bread and butter, or culture? What is realistic in education to one person may be idealistic to another, and vice versa. Education should yield bread and butter, and culture too. Education must be useful to all. It must be both realistic and idealistic by containing the best elements of each. The mercenary part of realism and the non-realistic part of idealism can be avoided. In education, idealism can and should be realistic, and realism can and should be idealistic. The blending of technical training and broad phases of education in the curriculum of some of the best trade schools in the United States is an example of combining idealism and realism.

Replacing obsolete, unsafe, and unattractive school buildings with modern structures and offering exploratory instruction in carpentry and plumbing to high-school boys are examples of realism in education. Providing instruction in the fine arts for all children who desire it and organizing an adult education program which includes instruction in many cultural subjects, such as English literature, are idealistic. Yet, all of these measures are utilitarian and at the same time are basic in the achievement of noble educational objectives. Therefore, in a broad sense, these measures are both realistic and idealistic. In short, regardless of cost, it is idealistic and realistic to establish schools which make a nation strong morally and intellectually, for a nation that has neither of these qualities in large amount cannot long survive.

If education is to serve its purpose well it must not be a tool of materialism nor, in reverse, something wrapped up in fantasy. It must have an allround practicalness which helps the individual meet daily problems and at the same time must assist him in reaching above routine and instinct. Instead of resigning ourselves to materialism or toying with the thought of moving into ivory towers let us seek realistic idealism.

WE SHOULD NOT CREATE ADDITIONAL PROBLEMS, NOR FEAR SERIOUS ONES

Life is filled with problems, many of them imaginary rather than real. Let us urge youth to conduct itself so as not to create additional problems such as those caused by over-spending or by treating others with arrogance. Youth can be taught to face existing problems which are real. Youth ought to be taught to use facts, initiative, and judgment in solving real problems rather than to attempt continually to escape from them. Such emphasis in education will tend to build self-confidence and will tend to dissolve both minor and major frustrations.

If youth is not taught to avoid creating additional problems and is not taught to face problems as they arise, some persons will become docile, spineless, and broken in spirit, others will become rebellious. Some will run away from home at an early age or attempt suicide later in life. Others will stoop to crime. In youth a citizen must be made aware of the fact that life is a constant process of adjustment to new ideas, to different people, and to changing conditions and that inability to adjust reasonably well has results which are serious to the individual and to the community.

. UNLESS USED, EDUCATION IS WITHOUT VALUE

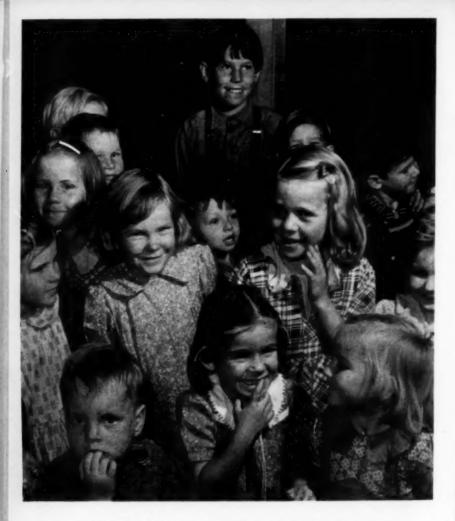
Schools have a duty to teach their students to put to use what they learn in school and the best that they learn out of school. Of what use is a diamond which remains hidden in a straw stack? Unless people put to use, either in a vocational or in a cultural way (and not a supercilious, artificial culture), what they learn, the learning is valueless to them and to the community in which they live. Our worth depends not so greatly on how much we know as on how well we use it.

Life-long appreciation of good literature or of paintings as a result of schooling gives one many satisfactions. It lends culture and refinement of a wholesome type to life. With this result the study of literature and art



Children Need Schools of the Type Which Provide a Strong Foundation for Learning

Such schools are needed East and West, in cities and in rural areas, for the sons and daughters of professional and business people, farmers, artisans, and semi-skilled and unskilled workers.



High Schools Have a Vast Influence on American Life

Each of the 48 states requires school attendance at least to age 16 .come up to 17 or 18. For better or worse, junior and senior high schools make their impress on millions of youth. This picture shows students at Flushing High School, in Flushing, a part of Queens Borough, New York City.

has been put to good use. Frequent application of mathematical principles in one's business or profession is a concrete illustration of learning

which serves a vocational purpose.

In the instances where individuals fail to use for either cultural or vocational purposes what they were taught in school, the fault lies partly or entirely either in the teaching or in the curriculum. Mere accumulation of knowledge is insufficient. It must be assimilated and used in order to be of value. If it is not only assimilated but also analyzed by the learner, its value at time of use will in most instances be increased.

ATTITUDES ARE IMPORTANT

Sometimes we are appalled by what we see about us, such as examples of avarice and other unhealthy attitudes, and feel that education has not done well for this or other nations. Many youths, perhaps a small minority rather than a majority, want to "get by." They desire to do as little as necessary instead of taking a constructive view of life. Thousands of these youth run athwart the law in the United States annually and must be taken care of at public expense, a considerable number from one to 40 years.

A large number of adults in all fields of work and in all parts of the country are motivated mainly by selfish desires, or lack a sense of responsibility. Such persons cause, directly and indirectly, most of our social problems. Many persons elbow others out of their way in order to obtain promotions or honors. Many engage in business entirely for the purpose of building a fortune, some not being perturbed if the business is detrimental to the public interest. Some groups of workers constantly demand increased wages and insist on decreasing their production.

Everyone should devote his or her life to worthy endeavor. Everyone who sticks faithfully to a legitimate job deserves a decent standard of living. These facts should be impressed on high-school students. Schools should teach that, in fairness to everyone, a person ought receive only what he deserves, what he earns, and that the idea that good things should come easy to one is nonsense. Schools will do well to crush the forces which shape

a "something for nothing" philosophy.

Tens of thousands who are paid to perform personal service, such as hair cutting, expect a liberal gratuity in addition to the charge for the service, even when not asked for extra service and when not doing the work well that they are paid to do. They palaver over those whom they think are wealthy, or influential, or anyone they believe is in the habit of tipping heavily. Daily these personal service workers are vindictive to those who do not tip them. They are encouraged in their groveling and truckling by those who like to impress others and who desire to secure special service, flattery, and a false sense of prestige. This is often accomplished by scattering coins to Pullman porters, hotel bell hops, waiters and waitresses, and others. Personal service workers with a superficial or hypo-

critical and grasping philosophy are vultures. They lack self-respect and a wholesome attitude toward life. They cause a problem, as do those who encourage them and then refuse to give financial support to worthy projects. This problem will probably increase in size and will undermine in part the democratic tradition.

"The great use of life is to spend it for something which outlasts it." Thus wrote William James (1842-1910), Harvard's eminent philosopher and psychologist. Certainly education should strive to inculcate this lesson in students so they will have an attitude of appreciation for the good work

of others, and an attitude, or sense, of social responsibility.

Perhaps the bulk of real happiness results from the realization that we are doing an important job and doing it well. People who strive only for financial gain are not likely to possess this realization. Therefore, they miss much satisfaction in life. Many people spend half of their adult years acquiring a bit of material wealth and the remainder of their lives defending it. In the end they leave nothing worth while behind them.

People who are taught both to do useful work and to appreciate worthy efforts and productions are the strength of the nation. Childhood is the time to teach these two fundamentals. Many of the maladjustments among

adults spring from their lack.

Education needs to do much more than it has done to date to decrease selfish aspiration for money gain and personal power on the one hand and on the other the tendency in people to drag their feet on the job and in life in general when they could be pushing ahead constructively and be worthy of a high economic standard of living. Education ought to plant within all who receive a high-school diploma a desire to be productive. This desire should be combined with a sense or attitude of appreciation and social responsibility. Of course the school cannot be expected to carry the entire burden of developing wholesome attitudes. Boys and girls usually do not go to school until they are five or six years of age and then attend school only about six hours a day, five days per week for approximately 36 weeks per year. Parents, as well as the school, have a very definite responsibility to develop desirable attitudes.

FOSTERING SELF-RESPECT DURING THE SCHOOL YEARS

The teaching of self-discipline in schools, discussed above, is a first step in fostering self-respect. The person who exercises self-discipline of a desirable sort has self-respect and, therefore, commands the respect of others.

Self-respect ranks high in the elements of character. Without self-respect a person has little which is of real value. Self-respect consists of respect for one's self. It emanates from doing the things that we know we should do and refraining from doing those that we know we should not do. Self-respect is laudable self-esteem. The person who has no respect for himself cannot gain the respect of others. But when he respects himself he will

respect others who are worthy of his respect, and they will regard him in like manner.

In Longfellow's lengthy poem, entitled "Michael Angelo: A Fragment," the following conversation concerning self-respect is stimulating. Benvenuto, a vain man, says to Michael Angelo:

I know that I am in the grace of God, And none henceforth can harm me.

MICHAEL ANGELO

None but one .-

None but yourself, who are your greatest foe. He that respects himself is safe from others; He wears a coat of mail that none can pierce.

BENVENUTO

I always wear one.

MICHAEL ANGELO

O incorrigible!

At least, forget not the celestial vision.

Man must have something higher than himself

To think of. (Section III, Part Second, as printed on page 560, The Complete Poetical Works of Henry Wadsworth Longfellow, Student's Cambridge Edition, Houghton, Mifflin and Company, 1893).

In a chapter on self-culture in his unusual and widely circulated book entitled Self-Help, Samuel Smiles, a Scottish author, said: "Self-respect is the noblest garment with which a man may clothe himself—the most elevating feeling with which the mind can be inspired." (Page 362, revised edition, published in 1900 by Harper and Brothers).

A school which teaches respect for ideas, practices, and persons worthy of respect is fostering self-respect. Schools ought to teach that politeness should be shown to all people and that one should be respected for earning his or her own way decently, whether engaging in business, being on a payroll job, or being the guiding spirit of a household. There are but three ways in which adults can get through life:

1. Earning their own living in a decent way

2. Living on someone else's accumulated wealth or current earnings without repaying in any way

3. Living outside the law or engaging in harmful types of moneymaking activities which are within the pale of the law.

Only the first of these provides self-respect, a fact that should be pointed out frankly to young students.

Self-respect is essential in a democracy. The individual is responsible for his or her actions. In a totalitarian regime self-respect can be of little importance. Slavish obedience may be all that is required. Where people live under a strict regimen rather than under the good influence of self-respect, they will obey as long as forced to do so, but they are likely to rebel when the opportunity presents itself.

Again, if a person does not have respect for himself, how can he have respect for anyone else? What would life be like if no one had self-respect? When I behave in a way that I know I should not, I lose respect for myself. I must respect the rights of others in order to maintain my respect for myself. If a person would have self-respect, he or she must cultivate it. Self-respect can be fostered by schools in the same way that schools can develop over-all character—by example, by instruction, and by the inspiration which can result from the combination of example and instruction.

Loss of respect grows rapidly. One incident leads to another until one's respect is over-shadowed by actions which repel. Each of us ought to have a self-respecting pride, in contrast to a haughty one. We should have respect for the good work that others do, to the extent of appreciating such work. We need to familiarize ourselves with problems, and with rules surrounding them, and become one with the rules, thus developing a respect for law. Developing respect for others and for law are steps in acquiring self-respect.

Schools can foster self-respect by appealing to the best that is in students. Frequently people are required to obey, rather than to respect themselves. It is well to turn this concept around. In schools a genuine attempt to instill respect is far more desirable than to place emphasis on requiring obedience. Respect should be instilled for such simple but basic virtues as honesty, effort, cleanliness, neatness, and community-mindedness regardless of where it is found.

If self-respect is fostered successfully, individuals during school years and for the remainder of their lives will have respect for law, for worthy public causes, and in general for the rights of others. Through fostering self-respect in students, the frequency and severity of many social problems will be decreased and a high type citizenry will be developed. Let us face requirements. Fostering self-respect is an ultimate phase of education.

DEVELOPING JUDGMENT AND SUSTAINED THINKING

The United States Bureau of the Census reports that in October 1952 there was a civilian labor force of 59,638,000, of which 4,766,000 had completed four years or more of college. Many of these workers use very poor judgment on and off the job, in the face of the extensive educational opportunities which they have had. Many have not established the habit of using their knowledge in order to think problems through to a satisfactory solution. Not infrequently in handling technical problems and in supervising workers, a man or woman who has not been graduated from high school commits fewer errors of judgment and does more sustained thinking than a college graduate handling identical problems. This situation is a serious reflection on education. It indicates the following facts:

That many persons who go to college should not have been admitted, or should not have been graduated, or, after leaving college, failed to make proper use of their education

2. That in these particular college graduates, judgment and sustained thinking (as well as adaptability) have been developed to such a small extent during and since the school years that these men and women cannot compete successfully with relatively uneducated persons who have adjusted well to their jobs, and in doing so have developed judgment and

sustained thinking in relation to their daily tasks.

In education we place heavy reliance on the student's intellectual capacity, the intelligence quotient, commonly referred to as I.Q. The I.Q. has a considerable amount of validity when determined by an expert, after administering an individual intelligence test. Why not place emphasis on determining one's "J.Q."—judgment quotient? Unlike the I.Q., it would be possible to develop an individual's "J.Q.," as one's judgment is not a fixed quantity. Judgment is closely related to life experiences and objective self-examination of an intelligent type, but it is the last of all human faculties to mature. The tragedy is that in many persons it never does mature.

A high-school senior stated that she did not know what she wanted. She said that, in going shopping, "I look at a scarf. Mother says I would not want that, so I don't want it. How am I ever going to know what I want?" In her childhood and youth this high-school senior was robbed of

the opportunity to develop judgment by making decisions.

Mrs. A goes shopping with Mrs. B occasionally, but it is a great ordeal for Mrs. A, as Mrs. B tries on dresses, coats, and the like, but seldom buys anything because she cannot make up her mind. Evidently while a child she was not given the opportunity to decide except in very trivial matters, and now lacks a reasonable amount of the ability to think things through for herself.

Judgment results from judging. Judging is the mental act of forming an opinion or decision through the use of discriminating perception. One who has judgment has the ability to decide on the value of something and draw a conclusion by a mental process. The case of each of the two persons referred to immediately above shows that lack of practice in judging and thinking for oneself hinders the development of these abilities.

Young students are short on experience but schools can emphasize features which call for the exercise of judgment, and its partner, sustained thinking. This emphasis can be accomplished in part by the use of planned experiments and by the use of quizzes which include questions calling for judgment and original thought. The use of questions involving more than one approach, or several possible answers, as well as the mere recollection of facts, develops the student's ability to arrive at an opinion or decision through use of discriminating perception. For instance, in the

teaching of American history, quizzing to see if students know the dates of the Revolutionary War is of less importance by far than asking the students to tell how they think the American scene might have been different had the war been eliminated through a compromise between the American Colonists and the British government.

Knowledge is one thing. The combination of judgment and sustained thinking is another. Knowledge should not be separated from judgment and thought. For many years schools have emphasized the accumulation of knowledge. They have done a good job of imparting information, and drilling in spelling, in the facts of history, in the facts of geography, and the like, so as to make the newly acquired knowledge stick in the learner's mind reasonably well. Schools have relied too much on this memory technique of education.

Basic knowledge is necessary, but the mere cramming of facts into the minds of students does not provide a balanced education. Much of the school's emphasis has been on subject matter and its yes or no answers with the problems worked out in the back of the book. This is an abstract, somewhat "cut-and-dried" approach, but is suitable in connection with exact principles in mathematics and science where one answer and only one is correct. When the school emphasizes the use of yes or no answers in areas other than that of exact principles, it virtually forces the student to produce one desired answer and discourages imagination and reasoning. Under such conditions variations are not provided. Subject matter becomes stereotyped. Life is not like that.

In many schools the development of judgment has been brushed off lightly with the admonition that care should be used in doing some things and that certain matters should be thought through thoroughly before a decision is made. Other schools have made it a practice to select and use questions and situations of the kind which force students to think and use judgment in arriving at the answers and then give reasons for their answers. Drill along such lines is as essential in school as is drill which is devoted to incontrovertible propositions, such as "two and two equal four."

As a further step in developing judgment and sustained thinking, a school can encourage its students to determine, through daily observation, which methods of doing a job after school hours, such as mowing the lawn, are efficient. In the same manner the school can have the student analyze practices of conduct in and out of school to determine which produce success and which are harmful.

In the limited time available for schooling and along with the experience of fact gathering why not teach fewer facts and introduce the experience of careful analysis?

After schools emphasize features calling for the exercise of judgment and thought, they can then determine how much the "J.Q." of their students is growing from year to year until graduation. A decade may be

required to develop such a measurement program on a valid basis, but why not try to develop it?

VITAL QUESTIONS

Why do many people lack a constructive view of life? Why do many have a "let me get as much as I can for as little as possible" philosophy? Why do so many lack a desire for worthy accomplishment? Why do a considerable number of college graduates fail to benefit from their education? Where is there a curriculum which always meets current and long-term needs? How can such a curriculum be obtained and maintained? How can regimentation of teachers be cut to a minimum? And of students? Is there a high correlation between diplomas and economic success? Why is it that so frequently the boy whom the school rates high turns out to be a white collar worker of rather small importance to the world and the boy who did poorly in school owns an auto repair shop, a wholesale grocery firm, or similar enterprise, and, therefore, attains prominence? Are our schools doing a reasonably good job with the students' time and with the private and tax dollars made available to them? How can our schools do a much better pob for the nation and for the individual? These, among others of similar import, are questions which deserve careful attention.

THESE WE SHOULD EXPECT

Schools of any type should possess the following three qualities, as indicated in the Pre Chapter:

Teachers with teaching skill, high principles, vision, and enthusiasm for educating.

2. An atmosphere for vital learning.

Flexible curriculums which come very close to meeting the current needs of all children, youth, and adults in the United States who are not mentally defective.

Individuals subjected to school experience should possess the following seven qualities somewhat in proportion to the number of years of schooling received:

- 1. The ability to read, understand, and evaluate what is read.
- The ability to express facts and ideas reasonably well, both in speaking and in writing.
 - 3. A keen awareness of safety and health hazards.
 - 4. A many-sided sense of social responsibility.
 - 5. Productive skills and a desire to use them.
- The ability to spend leisure time happily and without harm to self and others, and with little financial expense.

The habit of objective self-examination of attitudes, conduct, and abilities, and correction of defects within reason.

These seven qualities are not entirely independent of each other. For instance the first, dealing with ability to evaluate the printed word, and

the seventh, dealing with self-examination, both tend to develop the ability to think, as do others of the seven. Likewise, the third quality, dealing with safety and health, the fourth, dealing with a many-sided sense of social responsibility, and the sixth, concerning the wise use of leisure, each tend to develop the characteristics of community-mindedness and consideration for the rights of others. Thus, that which assists in producing one of these qualities may help in producing one or more of the other six.

Almost any school administrator will claim that his school or school system develops all seven of the qualities listed above. Certainly his students are taught to read but how well do they read? They are given a few hours of instruction per year or per month concerning personal hygiene and accident prevention, but to what extent has the instruction taken effect? The students may have been told to think things through, but in what degree have they actually developed the habit of objective self-examination? It is the earnest intent of this book to urge concentration on developing the above seven qualities during the school years. Such concentration will supply a broad foundation for adjusting well to a work-aday world and for continuing one's education throughout life, whether one leaves school at the end of the twelfth grade or is graduated from college. A desirable blend of the seven qualities will be produced in students by schools which have teachers, atmosphere, and curriculum of the type mentioned above.

In most instances the person who has been graduated from college should more readily have gained the above seven qualities, and to a greater extent, than the man or woman who did not enter college. A person who has had the advantage of graduate study in law, theology, medicine, or other similar fields, as well as graduate work leading toward the Ph.D., Ed.D., and other somewhat kindred degrees, should possess the seven qualities to a still greater extent. Furthermore, even if not going beyond high school, one should possess the seven qualities in larger measure ten years after leaving school than on the day of graduation. These seven qualities should come to be component parts of the individual and should grow with use.

Education in America is an ever enlarging activity. We continue to expand the existing colleges and technical schools and to establish new ones. Elementary and high-school buildings are erected by the hundreds each year. Thousands of magazine articles and hundreds of books and pamphlets are printed annually concerning how our educational systems are operated and how they should be improved. But have we determined just what we expect of education? There is much criticism of our schools. In the main, the youth coming out of them do not find contentment. Years after leaving school, a considerable number have far to go in the way of achieving social responsibility and effective living. Many a high-school or college student upon graduation is lacking in responsibility, per-

tinent knowledge, and good judgment. Education must do something positive to one in order for education to be worth-while. Even though the person has not continued in school after completing the twelfth grade, the seven qualities listed above should be implanted for life by the time the individual leaves full-time school.

 The next three chapters deal with the three quailties which should be expected of schools and school systems. The seven chapters following those three examine and elaborate the seven qualities we should expect of the educated person.

Teachers play an indispensable part in creating the atmosphere of a school. The nature of the curriculum, too, influences the atmosphere, and to some extent influences teacher selection. For those reasons the next three chapters, dealing with qualities which should be expected of schools, are not mutually exclusive.

What Is of More Value than a Good Teacher?

Teaching Is a Profession
Human Spark Plugs
Attributes of a Good Teacher
Selecting the Prospective Teacher
Pre-Service Education and Training of Teachers
Certification of Teachers
A Good Teacher Encourages and Inspires the Learner
Everyone Is Worth Attention
The Good Teacher Is a Conditioner
In-Service Training

NY man or woman who is adept at imparting knowledge and fond of doing so and exercises consistently a wholesome influence on youth and inspires them to learn is of great worth. Such persons should be urged to enter the teaching profession. They should be given the very highest salary that the public or that private schools can afford to pay. The use of such a process of urging and paying forms a sharp contrast to usual methods of selecting teachers and setting salary scales. It puts a premium on qualities of leadership which the individual has already demonstrated in fields of work other than teaching. In a large majority of cases, this positive method of selection brings to the classroom a broad experience and an understanding of life. With these a teacher can function par excellence.

What Is of More Value than a Good Teacher?

This chapter appeared in the March 1954 issue of *The Bulletin of the National Association of Secondary-School Principals*, pages 37-55, and is summarized here.

Teaching has become a highly responsible profession. Its members are required to have a keen sense of responsibility to the public and a relatively large body of specialized knowledge.

Among the attributes of a good teacher are the following: sincerity, interest in people, interest in learning and teaching, objectivity, neat appearance, self-control, courtesy and tact, patience and understanding, ability to organize and present thoughts effectively, ability to inspire others, sense of humor, and physical vitality.

Selecting the prospective teacher is a matter of vital concern. Not everyone is suited to be a teacher. High scholastic attainment does not assure that one has the ability or desire to impart information effectively in faceto-face situations. The fact that not everyone is suited to be a teacher must be considered when admitting students to college and when certificating persons to teach in public schools or when selecting others to teach in college.

A good teacher, at the elementary, secondary, or college level, encourages and inspires the learner, has an interest in him as an individual, and does a constructive job of conditioning the learner's attitudes.

In order to assist the teacher to become increasingly effective, it is desirable that continuous in-service training be made available.

THIS WE SHOULD EXPECT:

That teachers be selected with exceeding care since they are in a position to do much good or much harm, be stimulated from time to time to retain a wholesome view towards life and people and to develop farther their qualities of leadership.

That teachers, in addition to being masters of subject matter, should like people, understand pupils, and be skillful in teaching; should set a good example and encourage and inspire pupils; in short, they should have these four qualities: teaching skill, high principles, vision, and enthusiasm for educating.

That through a considerable increase in salaries, careful selection of the new, in-service training for all, and gradual pruning of the existing staffs, America's corps of teachers, kindergarten through graduate school, be made the most constructive influence of modern times.

A Proper Setting for Learning

Atmosphere and Learning
Minimum of Regimentation
What About Discipline?
Establish a Bond of Confidence
Enthusiasm Is Contagious
Provide Choices
Develop Intellectual Curiosity
Emphasize Constructive Living
Make the Most of Printed Materials
Magic in Blackboards
Mechanical Aids in Teaching
Special Projects
Reasonable Scholastic Standards

NTIATIVE and originality on the part of the teacher are important factors in establishing a proper setting for learning. There are many techniques of teaching and many teaching aids. Unless these are used in wise combinations and with imagination and skill they can be of little value. When used with imagination, skill, and good judgment, they can work wonders and create a sparkling and invigorating atmosphere for vital learning. In such atmosphere, charged with the spirit of helpfulness and progress, almost anyone is as likely to thrive on instruction as a wild fern thrives on a thickly wooded mountainside.

A Proper Setting for Learning

This chapter appeared in the October 1954 issue of The Bulletin of the National Association of Secondary-School Principals, pages 23-56, and is summarized here.

An atmosphere which arouses intellectual curiosity causes learning to be an interesting experience. In such atmosphere there is a minimum of regimentation. Discipline becomes something that is mainly self-imposed. A bond of confidence is established between the teacher and the learner. There is a contagion of enthusiasm. The teacher proceeds in a democratic way. The learner is provided with choices rather than being forced to follow a rigid pattern.

In order to have a proper setting for learning there must be an emphasis on constructive living. What is the purpose of acquiring knowledge unless knowledge will result in improvement of the learner and those with whom he comes in contact?

When providing a proper setting for learning the teacher indicates, in various direct and indirect ways, how one can live constructively.

Schools have numerous devices that assist markedly in creating a proper setting for learning—an atmosphere which stimulates intellectual curiosity. The teacher can make excellent use of up-to-date text and refererence books, photographs, charts, and posters. With blackboard, and chalk of several colors, or with flip charts, a skillful teacher can provide a change of pace and simultaneously impress clearly on the mind of the learner a series of significant facts or ideas.

Mechanical aids, too, play a part in providing a proper setting for learning. Projectors, models and machines, playback equipment, radio and television receivers each have their place in the instructing process. Even so, these mechanical aids to teaching do not supplant the teacher. A good teacher's enthusiasm and explanations are of more value to most students than anything they receive from teaching aids which are only exhibited. A proper setting for learning is not achieved through automatic substitution for high-quality instructing by a competent and understanding teacher.

The occasional use of a special project is a device used by many teachers to create interest in learning when interest lags. This approach calls for much initiative and good judgment and helps mightily to establish a proper setting for learning.

Insistence upon reasonable scholastic standards, too, plays a part in creating a wholesome atmosphere in a school. Where reasonable standards are lacking there may be general demoralization. Where the learner is shown how to improve, where good judgment is used in testing, extra credit given for extra work, and where special incentives are provided for scholarship there is bound to be a proper setting for learning.

THIS WE SHOULD EXPECT:

That there be an atmosphere in schools on all levels which (1) shows pupils and students that teachers are interested in them, and (2) which builds (through skillful use of teaching techniques and school facilities and equipment) the confidence of pupils and students in themselves and in their teachers to the extent of whetting and maintaining an appetite to learn.

What Kind of Curriculums Are Needed?

The Problem
Curriculums in Different Centuries
Curriculum Expansion in America
Strong Foundation for Learning
The High-School Curriculum
The Core Curriculum
Special Curriculum for the Brilliant Student
Assistance for the Slow Learner
Education for the Emotionally Unstable
Educational Opportunity for the Physically Handicapped
The Liberal Arts Curriculum
Extent of College and University Offerings Today
Offerings for Out-of-School Adults
Curriculum Changes Should Be Based on Facts
Counseling Solves Many Curriculum Problems

CURRICULUM which fails to meet current needs may be almost as useless as the occasional watering trough found in downtown areas of large American cities. The fact that the troughs were provided for humane purposes in a horse-and-buggy day does not affect their present uselessness. Education to be worth while and real must be based on life, all of life, and its problems as they exist in the generation of those for whom the education is being provided. This is the challenge of the experts who have the responsibility for curriculum development.

What Kind of Curriculums Are Needed?

THE reason for the existence of schools is to provide learning activities which are better organized to produce improvement in the individual than the learning activities which he or she meets away from school. The curriculum prescribes the learning activities to be provided by a school.

Organized knowledge is divided into a number of subject matter fields such as mathematics, chemistry, art, and history. A course is organized instruction covering a limited aspect or comprising a general survey of a field, as, for instance, solid geometry or European architecture, with a specified number of hours of instruction given per week for a stated number of weeks. Successful completion of a course generally carries with it credit toward a diploma or some kind of certification.

A curriculum is a systematic group of courses, or other arrangement of subject matter and educational activity, provided by a school of a particular type—high school, liberal arts college, law school, and the like. The liberal arts curriculum, at the college level, is a typical curriculum and is historic in its origins.

The curriculum of a school includes all of that school's organized offerings. The total curriculum for a school may consist of a number of subcurriculums, such as a commercial and a college-preparatory curriculum in high school, and a liberal arts, an engineering, and a business administration curriculum in a university. The curriculum is a general over-all specification of organized learning activity that a school plans to offer its students.

In the public elementary- and high-school area the newer concept of the curriculum regards it as including all the activities provided by the school for its students. This new viewpoint would consider a high-school stamp collecting club a part of the curriculum rather than consider it as being something extracurricular.

The curriculum for a school should not be outlined to the last detail in advance of a school year. A curriculum is something to be felt and sensed in part, from day to day, so that teachers can make improvements almost daily, within a general framework of scheduled activity.

Curriculums which are adequate today are likely to be in much need of revision within twenty-five years. Curriculum revision is an ever present task. The curriculum should be flexible so as to meet changing needs.

THE PROBLEM

What should persons attending school be taught and how should the time available for schooling be allotted among the subjects and activities scheduled? This is the problem, and it is one of major proportions.

In a century of universal schooling, the nature of curriculums and effectiveness with which they are put into operation greatly influence the characteristics of each succeeding generation. The curriculums have the potentiality of shaping a nation's future. Therefore, curriculums must be prepared with great care. Plato in his Republic stated the curriculum problem this way:

The beginning is the most important part of any work, especially in the case of a young and tender thing: for that is the time at which the character is being formed and the desired impression is more readily taken. . . .

And shall we just carelessly allow children to hear any casual tales which may be devised by casual persons, and to receive into their minds ideas for the most part the very opposite of those which we should wish them to have when they are grown up? (Page 377, volume 1, The Republic of Plato Translated into English, by Benjamin Jowett, (Third Edition.) Oxford University Press, 1936.

The curriculum is an outline indicating what should be taught. At times curriculums look good on paper, but produce disappointing results. Until they function in a proper setting for learning, even the best curriculums are like great paintings hanging in a dark room. The methods of transmitting the contents of the curriculum to the mind of the learner vary so greatly that in some instances the curriculum when in operation resembles a gaunt horse whose ribs can be counted at a distance of twenty feet. In such instances little of value is transmitted to the learner. The curriculum skeleton is apparent but it has been implemented badly. In some other instances the curriculum when in use resembles a small-boned man weighing 300 pounds. In such instances the curriculum outline or skelton has almost lost significance and the learner has been burdened with a mass of rather meaningless detail. The curriculum which produces ideal results is one which is planned to meet current needs and which is transmitted to the learner by a method lying between these two extremes.

The needs of those who are to be instructed seem frequently not to be taken into consideration when certain curriculums are formulated. An effective curriculum is developed around the needs of those who are to be taught and around the over-all needs of the community or nation in which they live. An effective curriculum contains whatever is necessary to prepare the learner to live constructively in the world in which he finds himself. An effective curriculum in a system of compulsory education also takes into consideration the interests and abilities of the student.

The curriculum expert balances against the time available for schooling the various subjects, courses, and activities which can prepare the learner to live constructively. This balancing becomes intricate. It is more than a matter of including one subject and excluding another. It involves the allotment of greater periods of time for some parts of the curriculum than

for others and necessitates thorough investigation.

The curriculum problem is further complicated by the fact that state laws prescribe the teaching of certain courses or subjects in public supported schools, or authorize state educational authorities to issue and enforce a curriculum for public schools of different levels in the state. Legislative control of the curriculum, therefore, can extend from kindergarten entrance to college graduation. This situation has proved constructive to some degree in the United States, but it can also be exceedingly cumbersome and shackling. Legislative control of the curriculum can go so far as to stipulate the subjects or courses in which instruction is permitted to be given in public schools and to specify subjects and courses which shall be compulsory.

General education versus specialization. During the last fifty years there has been a curriculum race between those who emphasize general education, particularly the humanities, and those who advocate specialization by means of vocational education and instruction in scientific subjects.

The tremendous widening of knowledge during the last century was accompanied with the concept of sending everyone to school. These two developments require the striking of a curriculum balance at both high-school and college levels. In the high school, general education consisting largely of choice parts of the humanities (especially literature), basic principles of the natural sciences (chemistry, physics, and biology), and basic principles of the social studies (geography, history, civics, and problems of democracy) must be balanced against vocational education since some students will go to college and many will not. In colleges and universities a balance is needed between the natural sciences and the humanities in order that young men and women may avoid excessive specialization before obtaining a broad education, and to avoid the graduating of persons who lack an understanding of either scientific principles or human affairs.

All people above a subnormal level of intelligence should have some instruction in both the humanities and in science. The butcher, the baker, and the electrical engineer are no exceptions. Ethics is needed to avoid destruction of civilization and science to avoid its stagnation. Both ethical conduct and scientific ability are needed in large quantities, now. The humanities (and also the social studies in high school and the social sciences in college) are excellently adapted to set ethical standards and the natural sciences to produce scientific ability. So that all may have some degree of clear perspective in life, the humanities and science should be available even to those who will stay in school only a few years.

In the main the humanities emphasize man—his problems, aspirations, and achievements—and neglect nature, whereas science devotes its attention to nature and almost forgets human relations.

Science produces intellectual integrity, for the scientific approach aims at finding the truth. The philosophical, when not combined with the

scientific, can degenerate to mere mental speculation of the type which seems to have been common among intellectuals in the Middle Ages when theology and the philosophy known as scholasticism dominated the curriculum. The humanities as we know them today were then partly lost and partly forbidden and scientific investigation was hampered by theological restrictions even though little was known about science at that time.

In order that schools may produce men and women with perspective and ability to shape well a constructive personal philosophy of life, the curriculum must carry to each student both science and the humanities. This is necessary in the high-school curriculum owing to the fact that many in high school do not go to college, and it is necessary on a larger scale in the college curriculum. In college, of course, the student majoring in science should devote more time to science than to the humanities, and vice versa, but the curriculum should provide liberal amounts of science and the humanities for all.

An increasing number of scientists is needed, but curriculums for prospective scientists should contain some of the humanities and social sciences, since a curriculum devoted to science does not teach people how to deal with other people but rather with atoms and microbes. Including humanities and social science in the curriculum provides the possibility of preparing the young scientist to be a citizen, and also a director of other scientists, as well as a technical expert in a scientific field. Similarly, the college student specializing in business administration or art needs some familiarity with science to develop habits of careful investigation and in order to obtain balance in understanding and appreciating science.

In a remarkable article entitled "Science and Human Affairs," published in the February 9, 1951, issue of Science, E. C. Stakman, recent president of the American Association for the Advancement of Science, shows in a concrete way that the modern world is gravely in need of both the social sciences and the natural sciences, and that the humanities, the social sciences, and the natural sciences each play a significant role. In concluding his article Dr. Stakman points out that a moratorium on the conflict between science and the humanities is needed. He states:

For science, religion, music, art, history, literature have values in the degree to which they make men happier, wiser, and better. The value of each varies with individual men. All are valuable insofar as they illuminate the intellect, refine the spirit, and stimulate useful and ethical conduct. To promote truth, wisdom, and justice is not the prerogative of any one guild. The factors and forces in the evolution of the human intellect and spirit are varied and complex; and it is unscientific and unethical to deny to each its fair share of credit for its contributions.

Humanity needs both the sciences and the humanities; both are humanizing to the extent to which they humanize. There is need for more understanding and tolerance between scientists and humanists; properly motivated, all are humanists and their joint contributions can accelerate man's evolution toward intellectual enlightenment and spiritual refinement.

In an address at Pennsylvania State University in June 1955, Dwight D. Eisenhower, President of the United States, said the following concerning general education:

As nuclear and other technological achievements continue to mount, the normal life span will continue to climb. The hourly productivity of the worker will increase.

How is the increase in leisure time and the extension in life expectancy to be spent? Will it be for the achievement of man's better aspirations or his degradation to the level of a well-fed, well-kept slave . . ?

Merely to state those questions sharply reminds us that in these days and in the years ahead the need for philosophers and theologians parallels the need for scientists and engineers . . .

Answers can be found only by broadly informed, wisely sympathetic, spiritually inspired minds—the product of general education that properly blends the practical and technical with the liberal and cultural.

In this country we emphasize both liberal and practical education. But too often it is a liberal education for one and a practical education for another. What we need is general education, combining the liberal and the practical, which helps a student achieve the solid foundation of understanding—understanding of man's social institutions, of man's art and culture, of the physical, biological, and spiritual world in which he lives.

This kind of education is sorely needed in this country-and throughout the world.

Two horns of the curriculum dilemma—time for basic instruction; interesting the learner. Today schools can instruct successfully in any area which is worth including in the curriculum. The production of much in the way of special materials, equipment, and architectural facilities has had a part in curriculum expansion. Such production will continue, and, accordingly, will make further curriculum expansion possible. But time for instruction in subjects which are basic, and then interesting the learner in specific curriculum offerings which may be required of him, such as algebra and world history, are of the essence.

With the fields of organized knowledge ever increasing in number, many of them widening, and life becoming exceedingly complex, it becomes more and more difficult to decide what subjects and activities shall be included in the curriculum, and how much time shall be given to each. Also, the problem of determining which curriculum offerings will interest the learner is still to be solved. Good teachers and an atmosphere for vital learning will do much to solve the problem of interesting the learner. Even so, a determination must be made as to fundamental courses which should be taken, whether or not they may be the most alluring. In behalf of a balanced education, students who are still immature individuals should not be given complete freedom to choose "easy," attractive sounding courses.

Closely tied to the matter of the learner's interest is the matter of his capacity. As mathematics is inserted in the high-school curriculum from the ninth through the twelfth grades, the question needs to be asked: "Do the mathematics courses keep step with the learner's capacity for mathematics as that capacity enlarges from the ninth to the twelfth grades?" Un-

less the double problem of time and interesting the student is settled reasonably well, the work of the curriculum planner will be unsatisfactory.

It is not always wise to drop subjects from the curriculum because some students have not seemed to benefit from them. If this practice of dropping subjects when some students react unfavorably to them should be followed, the curriculum would soon become a disjointed affair, interspersed with serious gaps. There is sufficient time available for schooling to include in the curriculum for each type of school the things which are basic. Finding the things which are both basic and of interest to the student, and the relative amount of time to devote to each, is the crux of the problem. Subjects should be selected because of the light they can shed on the everyday business of living in a complex world. The subjects selected should include the humanities and science as well as the obviously practical, such as hygiene, first aid, and automobile driving.

Four fundamentals. It is the belief of this writer that curriculums at the elementary, high-school, and college levels should emphasize above everything else the teaching of (1) reading, (2) writing, (3) thinking (which includes comparing, evaluating, and arriving at a conclusion) and (4) the desirability of developing a constructive attitude toward life. Vocational offerings should be introduced in such a manner as not to obstruct unduly the teaching in these four areas, since, if the instruction is thorough in these areas, most of the learners will be able to find their way in life under all kinds of circumstances. Vocational skills, for example, will be acquired easily after leaving school, some of them almost immediately.

A curriculum should develop life-long, wholesome patterns of thought and action and should produce enjoyment for the learner rather than just instigate mental gymnastics. It certainly seems that children and youth should be taught to understand life and their obligations to others, that they should be taught to recognize and appreciate persons and things of real worth, and that habits of analysis should be instilled. Thorough instruction in reading and writing is desirable from first grade to college graduation, but both are much overlooked after the sixth grade. Subjects, courses, and activities are needed which will require students to think, although stimulating thought is as much, or more, a function of the teacher as of the curriculum. The fact that great hordes of youth who have not been taught to think emerge from American high schools and colleges annually indicates a serious curriculum deficiency.

Curriculums for special groups. Curriculums ought to be developed not only for the typical child and youth found from first grade to college graduation but also for the brilliant student, for the slow learner (in some instances), for the emotionally unstable, for the physically handicapped, and for the out-of-school adult who feels a need for organized, part-time instruction. Insufficient attention has been given to curriculum needs of these special groups.

Mass education is one of the most remarkable developments of modern times. It is more remarkable than the invention of the airplane or the harnessing of atomic energy. It is surprising how much is accomplished by mass education and how well it takes care of a wide range of individual differences in a classroom. Even so, there is a limit to its effectiveness.

It has been said that people are more alike than different and that the differences make them interesting. Both parts of the statement seem reasonable, but the differences in people pose a large problem for the educator in a system of mass education. That problem falls squarely in the lap of the person whose duty it is to provide a curriculum for all who are compelled to attend school.

Mass education presents many problems which need to be met. The public school curriculum falls like a blanket over the child with an I.Q. of 150 and the child with an I.Q. of 50, on the emotionally stable and the emotionally unstable, and a considerable number of physically handi-

capped children and youth.

The enforcing of compulsory school attendance laws soon points to the need of special curriculums for those who to a marked extent are mentally advanced or retarded, for those who are suffering from serious emotional disturbance, and for those who have a pronounced physical handicap. The usual curriculum will be of little value to most children and youth within these categories. Since the educational needs of these pupils are unlike those of the average child and youth, special attention is required.

In the fall of the year in a grocery store one finds assortments of freshly dug potatoes. Even though of the same general variety (from Maine, or from Pennsylvania, or from Idaho, and the like), they vary in quality and size and are graded and priced accordingly. Some are large, well formed, have a smooth skin, and are solid; others are smaller and less attractive to the housewife's eye. The very small and badly scarred potatoes have been screened out and do not reach the grocer's bin.

Why the difference in the quality and size of potatoes of the same variety at time of digging? Was there a difference in the quality of the seed potatoes which were planted early in the season? Is the difference due to the potatoes being grown on different farms, even though adjacent to each other and subject to the same climate? Did the quality of the soil vary on the different farms? Did the different farmers use widely divergent amounts of time, skill, equipment, fertilizer, and spray in raising their

Somewhat similar questions can be asked about individual differences in the pupils who make up almost any class in a public elementary or high school. Many persons have an extremely limited capacity for education. Others seem to have almost unlimited capacity. Some pupils have much capacity in one subject matter field, such as mathematics, typewriting, auto mechanics, music, art, or chemistry, and little in a second field. Other pupils appear to learn at approximately equal speed in several or in all subject

matter fields to which they are directed. Some individuals who can be presumed to have slightly less than average capacity seem to learn fairly rapidly and solidly, while others who apparently have much capacity seem to use it poorly. Still others show so little facility in school work that they present a baffling problem. Forcing some pupils to learn at a level beyond a certain school grade, or in certain subject matter fields, is like trying to make a river run uphill.

Heredity and environment each affect one's rate and quality of learning. This is evidenced by the fact that even among brothers and sisters who grow up in almost identical environment and go to the same schools, extreme variation in interests, attitudes, and sometimes wide difference in degree of intellect and in aptitude is noticed.

In a system of compulsory education which reaches into every city and town and into rural areas, touching almost every person, the problem of individual differences becomes exceedingly important. It has a vital bear-

ing on curriculum development.

Compulsory schooling places on the educator a serious dual responsibility to provide a curriculum based on (1) a combination of community and national needs and the interests, needs, and abilities of those upon whom education is being thrust, and (2) to build within that curriculum a program of studies for each child or youth enrolled. To disregard this combination when developing a curriculum for a school in which attendance is mandatory or to neglect building for the individual a program of studies is equivalent to enslaving the students. Education does not flourish in an atmosphere of enslavement. When the curriculum is not geared to the interests, needs, and abilities of students, their progress in school is as anemic as the status of civil liberties under an authoritarian government.

In a system of compulsory education, the student cannot escape the curriculum which is approved for the classes in which he is placed. The usual curriculum should not be forced on the brilliant student nor, in all instances, on the slow learner. Those with an extremely high intelligence may soon lose interest in school when the curriculum is geared to average ability. The child with an I.Q. of 70 can profit from school for a time if given special attention but finds many parts of the junior high-school curriculum too difficult. The child with an I.Q. of 50 or less benefits very little from education.

Since both the brilliant and the dull are compelled to go to school, they should each be given a curriculum which presents a challenge to them. When the challenge is provided, the student who must undergo formal education and the people who pay the money cost of public schools both receive a great deal of value.

In the modern scheme of education, twenty to fifty persons are brought together in a group in a classroom for instruction at the elementary- and high-school levels and more than a hundred in some lecture courses in college. It is asserted that each group is approximately homogeneous as far as degree of academic achievement is concerned, and to some extent the assertion is correct. But the extent to which it is not correct is the part which is of concern. Some in the group will progress much more rapidly than expected of the group, if given special attention. Some, particularly in high school, will lag far behind. There are examples in America's public schools where this approximate classroom homogeneity includes the moron or the genius or both.

The boy or girl who is so keen mentally that it is difficult to keep him or her busy needs and deserves special attention. Those who have great hardship in absorbing the instruction also need and deserve special attention. The offering of college scholarships to those who attain the best grades in high school is desirable but furnishes a long range rather than an immediate incentive. It does not adapt the high-school curriculum to the needs of the brilliant student. Nor does the introduction of vocational education necessarily solve the school problem for the slow learner.

A large but undetermined number of persons who suffer from emotional instability can be helped by the school if a special curriculum is provided. Inability of a child or adult to solve personal problems is a contributing cause of mental disorders ranging from mild neurotic conditions to functional insanity. The psychiatrist and the educator when working together can prevent neuroses of different types and other mental abnormalities which occur during adolescence or in adult years. Any public school curriculum should assist pupils to meet problems and should discourage abnormal escapes from typical life situations. Unfortunately the standardization of mass education makes it difficult at present for even the most competent teachers to assist effectively the emotionally unstable pupils in their classes. For emotionally unstable children and youth or out-of-school adults a special curriculum should be provided which will help them face reality with composure, confidence, and good judgment.

A considerable number of physically handicapped children and youth receive little in the way of educational opportunity, even though states have schools for the blind, the deaf, and the crippled. Whether the physically handicapped child goes to school or remains at home, he should be given the kind of curriculum which his particular handicap requires.

In short, much thought needs to be given to devising public school curriculums for the brilliant student and for the slow learner in elementary school and in high school, for the emotionally unstable (whether of compulsory school age or in middle life), and for the physically handicapped child and youth. The curriculums usually found in most parts of the United States do not fit the needs of these particular individuals.

Bulletin 1949, No. 2, Federal Security Agency, Office of Education, 1949, prepared by Elise H. Martens and entitled State Legislation for Education of Exceptional Children summarizes enactments by the respective

states in behalf of children of elementary- and high-school age who have difficulty in profiting from the usual public school curriculum. The bulletin shows that each of the forty-eight states has by law made some provision for the residential care of youth who are blind, deaf, or mentally deficient, but that state residential schools for handicapped children take care of only a small part of the children who are in need of special educational assistance, and that most children having physical, mental, or emotional problems live at home and either attend or are expected to attend local public schools.

As to services for highly gifted children, Bulletin 1949, No. 2 shows that state laws "take little cognizance of the state's responsibility to make special provisions for these" (page 23), and that no state makes legal specification insuring appropriate education for the brilliant student (last page; unnumbered). The bulletin recites on page 23 "there is little to say about . . . (service for highly gifted children) in this report except to point out the urgent need of doing something about it."

In the next few years the situation improved somewhat. Arthur S. Hill reported in the June 1953 issue of School Life that, during the period June 1949-June 1952, bills were passed by fifteen state legislatures, extending special education programs or establishing new ones. These involved state aid to local school districts but did not appropriate the necessary

funds.

In order to help physically handicapped and other exceptional children and youth, they must be identified. Many physically handicapped of school age are not in school. Bulletin 1949, No. 2, the Martens study, pointed out that none of the states has adequate legal machinery to find all exceptional children in need of special educational facilities (last page). State health and welfare agencies can be of use to school administrators in finding the physically handicapped, the mentally retarded, and the emotionally unstable. The use of hearing, vision, and psychological tests, in addition to health examinations can spot many who will need medical attention or a special curriculum, including the brilliant student who can benefit from a curriculum adapted to his ability.

Two pamphlets, written by Romaine P. Mackie and Lloyd M. Dunn, published by the United States Department of Health, Education, and Welfare in 1954, indicate the spotty attention which is being given to exceptional children. The first of these two pamphlets is entitled State Gertification Requirements for Teachers of Exceptional Children, Bulletin 1954, No. 1. It shows that there are special certification requirements in thirty-two states and the District of Columbia for teachers of one or more types of exceptional children, but that more of these special certification requirements deal with the teaching of children having speech difficulty than with any other type of exceptional children. Comparatively few states have special requirements for teachers of the blind, deaf, socially

maladjusted, and the gifted.

The second of these two pamphlets, entitled College and University Programs for the Preparation of Teachers of Exceptional Children, Bulletin 1954, No. 13, points out that numerous institutions of higher learning are giving attention to the matter of preparing teachers to deal with exceptional children. Specialized sequences of preparation for teachers are offered by 122 colleges and universities in the United States, but in only two is there a sequence of preparation for those who teach the gifted.

In the interest of a higher standard of living and a better life for all, the brilliant student who evidences leadership potentiality, and the slow learner (under certain conditions), the emotionally unstable, and the physically handicapped should each be given special curriculums which will develop the best which the respective individuals possess. Even though the need for special curriculums is apparent, curriculums which call for separating brilliant or slow, or emotionally unstable, or physically handicapped children and youth from their classmates are only a last resort, for the providing of special curriculums is certain to create as well as solve problems. In a democracy all types of respectable individuals of average or better intelligence and of reasonable stability need to learn from each other. All such types can make a contribution. The person whose intelligence is below average but not excessively low, too, can have something to offer.

Besides the plans to be made for the exceptional elementary and secondary students, much thought needs to be given to curriculums for out-of-school adults of all kinds. The total offerings of nearly any adult night school are rather meager. Day and evening curriculums for out-of-school men, women, and youth probably should not be highly organized. However, it seems that many of those which do exist are rather poorly organized. Thus the program of adult education has no where nearly reached its potential.

Curriculums need constant study. These statements are somewhat general but, together with views expressed throughout this chapter, constitute a framework which can be used in developing a curriculum to meet the current needs of those enrolled in a specific school. No one can safely lay down precise curriculum criteria for an entire nation for a 25-year period, or for a nation for a one-year period, or for one school for a 25-year period. Curriculum criteria of a precise nature must be fashioned for each school and be revised almost continuously.

It is necessary to study everlastingly the curriculum needs of any particular geographical area and of every school within that area in order to develop for each school a curriculum which meets current needs. Determining such a curriculum is no easy matter. Curriculum development requires a considerable amount of research into current educational needs in different parts of the country. It involves scientific predictions of business activity and educational needs approximately 30 years into the future. In order for a curriculum to be flexible, it must be subject to change each

year. It must keep pace with the needs of a community. At a given time the needs will be different in one community from those in another community which is far distant and of a different type. Drastic changes in the curriculum should not be frequent, however, and all changes should be based on scientific study.

A curriculum is not necessarily outmoded because of being in use for a long time. Nor does a curriculum need to be revised with the same frequency in all types of schools. It needs to be changed more often in high school than in law school due to the difference in function which these two types of schools perform and the vast difference in background, interests, and abilities of students in high school as compared with the lesser differences in range among law students.

The curriculum situation in the past. The question of what should be taught in schools—the curriculum—is one which either receives little attention or raises many a stormy controversy. This has been the case in Europe for the last one thousand years, from the latter half of the Middle Ages to the present, and in America almost from the time of its first schools in the 1600's. For centuries the curriculum has been either held tightly by interested groups as a personal possession, or has been almost ignored. The curriculum has alternated in this two-part cycle. In the ebb and flow it has received quite a bit of objective attention at time but over the years not as much as it deserved. Fortunately, down through the ages good teachers who have had inappropriate curriculums thrust upon themselves have found ways of accomplishing much significant educating.

Curriculum development is a field in which prejudice has been surpassed only by fumbling. The conflict over what should be included in the curriculum and the amount of time to be given to its component parts has become more pronounced as a greater percentage of the population receives formal schooling. This conflict has become decidedly noticeable in the last century and a half. At various times one or more of the following five conditions have denied the student the type of curriculum he or she deserved:

1. Ecclesiastical and/or political domination. During the Middle Ages the church dictated the curriculum. Then during the Reformation the leaders of both the Protestants and the Catholics largely determined what should be taught in the schools of Europe.

In citing examples of political domination of the curriculum, Napoleon Bonaparte can be mentioned. He seized control of education in France in 1808 and controlled the curriculum of elementary and secondary schools and of colleges and universities, as well as the appointment and payment of teachers who were to be shackled by his curriculums. The system was vicious, since Napoleon was interested in education mainly from the standpoint of how it might be used to serve his political aspirations. In the middle of the last century, under the regime of Louis Napoleon, courses in

history and philosophy were stricken from the curriculum of the University of Paris.

Curriculums in other European countries have also fared badly from time to time. During the last 20 years the world has been made aware of striking examples of the political domination of curriculums by totalitarian regimes.

2. Inertia. An intriguing book by Harold Benjamin, Professor of Education and Chairman, Division of Social Foundations of Education, George Peabody College for Teachers, Nashville, Tennessee, focuses attention on the problem of curriculum revision. This satire on education is presented in the form of lectures given by a fictitious authority on stone-age education. The book was published by McGraw-Hill Book Company in 1939 and is entitled The Saber-Tooth Curriculum . . . Including Other Lectures in the History of Paleolithic Education, by J. Abner Peddiwell, Ph.D., as told to Raymond Wayne and Several Tequila Daisies, with a Foreword by Harold Benjamin. The book infers that theory and practice in education change much too slowly to meet current needs and that an antiquated and out-of-date curriculum tends to hang on, to the detriment of each succeeding generation.

In reflecting on Professor Benjamin's book one can readily recognize that the same situation which he relates in exaggerated form existed in western Europe at the beginning of the Renaissance. Perhaps it has always existed. At least, a study of curriculums from the dawn of modern times shows that curriculums have been a compromise between what already existed and what reformers asked for. Thus curriculums have lagged behind needs and isolated proposals made from time to time, based on those needs. During the last two centuries, and particularly during the last seventy-five years, this lag has been especially noticeable. Many of the newer areas of knowledge have gained access to the curriculum only with great difficulty.

3. Foggy thinking. An enormous quantity of literature concerning curriculums has been produced during the last twenty-five years. In examining this literature it becomes apparent that there has been quite a bit of shallow and some very foggy thinking on the matter. In curriculum planning the educator will do well to consult the philosopher, the scientist, and statistical data concerning employment trends, and, after adopting a curriculum, to secure a staff of capable teachers who desire to carry out its spirit.

Curriculum development has come to be a highly intricate procedure. In order to develop a suitable curriculum for a school or school system a number of steps are employed. Working committees are organized and directed by curriculum experts. General and specific aims of instruction are selected. Instruction materials, methods of instruction, and methods of evaluation are determined. As a result of these selections and determinations, courses of study are prepared dealing with biology. English, and the

like. These courses of study assist teachers to put their respective parts of the curriculum into operation.

The course of study is an official guide for the teacher and for the school administrator. Frequently it appears in mimeographed and sometimes in printed form. It deals with one subject matter field or with an area which combines two or more fields, and for a particular grade or a combination of grades or for an instruction group designated in other ways. Courses of study may be rather detailed. Among the types of data included in them are the following: aims of the course, expected results, nature and extent of materials to be studied, suggested instructional aids, textbooks, reference material, activities such as laboratory experiments or field trips to be scheduled, teaching methods to be used, and ways in which to test the amount and accuracy of learning on the part of those receiving the instruction.

After courses of study are prepared, they are used experimentally and then put into continuing use. They are revised before being put into continuing use, and periodically thereafter if some one in authority requires revision or if committee chairmen take the initiative to accomplish the revision.

The curriculum development process is an everlasting one which studies more or less systematically the program of a school or school system with a view to its improvement. Nevertheless, basic facts are often overlooked in determining what the curriculum for a school shall consist of. When this is the case, courses of study which may follow will reflect the defect.

During the decade 1930-1940 there was much curriculum reorganization in American public schools, but it was mainly a course of study affair rather than a matter of significant improvement in the curriculums on which the courses of study were based. This ten-year movement was intensive and curriculum revision became very technical. Perhaps half of the public school systems of the United States then prepared, studied, or borrowed courses of study as a means of indicating how the curriculum would be put into operation. Yet, in terms of results which benefited the student, the decade was one of much bustle and less productivity than might be desired. The tendency of some educators during the last thirty years to build a technical jargon for the field of education, to talk much in abstract pedagogical terms, and to neglect looking broadly at life and the needs of the persons whom they are attempting to educate has had unfortunate effects on the curriculum. To some extent the technical jargon has become a way of saying something that is simple, and at times even foolish, in a way that makes it sound profound, and leads not only to foggy thinking but also to pontifical complacency and pretentiousness.

4. Preferences of educators. Many educators are largely objective. Often proceeding from teaching to school administration they view the curriculum broadly and make revisions on an objective basis. Some educators, however, do not subordinate their personal preferences for science, or for

mathematics, or for other subjects, to the interests, needs, and abilities of those for whose education they are responsible. The classical (academic) curriculum, which emphasized the study of Greek, Latin, and mathematics, dominated European schools from late medieval times to about 1925. It dominated curriculums of American schools until approximately fifty years ago.

In the sixteenth century a German named Johannes Sturm (1507-1589) organized in the city of Strasbourg, an early cultural center of Europe, a successful school. Sturm-was a devoted classicist. He was a highly successful organizer and was well known in Europe as a result of his school and his writings on education. His school became the forerunner of secondary schools in Germany. Sturm was in a position to dictate curriculum development and did so. He adopted the classical curriculum for his school and in all probability did so because of his preference for the classical tradition. He was an authoritarian and no doubt believed that the subjects which he considered good would be good for his students, and that, therefore, no further study need be given to the curriculum! By adopting the classical curriculum for his school in Strasbourg, Sturm exterted a tremendous influence in perpetuating emphasis on the teaching of Greek and Latin to the present time. Sturm probably did as much as any one person to saddle the classical curriculum, which has both advantages and shortcomings, on the modern world.

Those educators who for years urged the classical curriculum maintained that the study of Greek, Latin, and mathematics provided a useful intellectual discipline. This viewpoint made it difficult to supplant ancient with modern languages and to introduce subjects relating directly to modern life. Of course lay pressure, too, has its effect on the curriculum. Even today, some schoolmen would drop Latin but the community objects. The providing of subjects relating to modern life, especially for those who will spend only a few years in school, has been a very real curriculum problem. It can be traced in large part, but not entirely, to the indulgence by educators of their preference for Greek, Latin, and the like. This indulgence crowds out objective, searching thought concerning the curriculum.

5. Competition among subject matter specialists. At the college and high-school levels, and to some extent in elementary schools, competition among subject matter specialists occurs. Such competition indicates a lack of balanced concern for the central figure of any educational program, the learner. If the social science experts continue to clamor for additional required courses in their field and if the specialists in the natural sciences demand on their part an enlarged portion of the student's time, the resultant competition is bound to result in conflicts which will decrease for the student the value of the curriculum.

There is also the struggle for injection of new vocational courses and proposed club activities into the high-school curriculum, and additional technical courses at the college level. This struggle is often followed by scurrying about on the part of patrons of each of the new curriculum features in order to justify the introduction of the new and to secure enrollments. Such a situation can become as bad as the forcing of Greek and Latin on thousands of European students in the sixteenth and seventeenth centuries and Latin on multitudes of students today in Europe and in England, and on a smaller proportion in the United States.

CURRICULUMS IN DIFFERENT CENTURIES

This section and the one which follows are not meant to chronicle in detail the rise and nature of curriculums from the beginning of mankind. Such treatment is given at length in different works. One convenient to consult was written by R. Freeman Butts, entitled A Cultural History of Education, and was published by McGraw Hill Book Company, Inc., 1947.

An extensive curriculum as found in a typical European or American university or in the public school system of an American city of 100,000 population is a product of modern times. Highly organized education reaching a large proportion of children and youth, as today, did not exist in ancient times. Then facts and points of view acquired by most boys and girls were secured through observation and imitation on their own part, and by instruction in the home. Plato's Academy in Greece and the "University" of Alexandria in Egypt were among the few well-known early institutions of learning. The University of Bologna, Italy, chartered in 1158, revolved around law lectures by Irnerius and was the forerunner of our present colleges and universities. During the last 200 years there has been an almost steady trend in Europe and in America toward establishing schools on three levels-colleges and universities for both broad and specialized instruction at a high level, secondary schools to prepare for college entrance (and rather recently for other purposes as well), and elementary schools for children.

Over the centuries and in different countries there has been a wide variety of curriculum offerings. Some of these offerings were very practical.

Some were highly impractical.

In early Egypt special attention was given to educating princes and those preparing for the priesthood. In the palaces there were schools for young noblemen. The curriculum of these palace schools dealt largely with instruction in good manners, principles of ethics and government, with the science of optics, astronomy, and architecture, and with the measurement of land. Swimming and gymnastics were also taught. For a civilization of the remote past this seems like a remarkable curriculum, except that it was limited to a very small percentage of the population.

In China a much more narrow curriculum existed. There the education of youth centered around the memorizing of the writings of its great philosopher and teacher, Confucius (550 or 551-478 B.C.). Since Confucius had laid the foundation for the Chinese governmental structure, this education was of advantage to a person who contemplated entering public life.

However, the clumsiness of the Chinese language and the isolation of China from other parts of the world did not promote the development of a large body of scientific information. The student in China, therefore, had comparatively little intellectual perspective, and education stagnated.

The curriculum in ancient Greece called mainly for the studying of Homer, rhetoric, mathematics, music, and gymnastics. Mathematics became an active science in Greece about 600 B.C., but like some other subjects became eclipsed centuries later during the Dark Ages following the demise of the Roman Empire.

Rhetoric, the skilful or artistic use of speech, was emphasized in the training of youth since public debate was the usual procedure in reaching public decisions under the Greek form of government. Rhetoric has held one of the chief places in the curriculum for centuries. Today rhetoric generally refers to the art of expressing oneself orally or in writing. In a derogatory sense, rhetoric is looked upon as artificial elegance or obvious artifice in the use of language. Originally the term rhetoric referred to the principles of the art of oratory.

In ancient Greece gymnastics were emphasized as a means of building strong bodies. Greek youth were trained to run and take part in other physical exercises. This training served as preparation for the Olympic games which attracted much attention in all the Grecian states.

Among the great teachers in Greece were Socrates (469-399 B.C.), Plato (429-347 B.C.), and Aristotle (384-322 B.C.). Socrates taught morals, logic, and political science. Plato founded a school which he called the Academy. In it he taught his system of philosophy and the higher branches of mathematics. He favored including geometry and music in a curriculum of liberal education. Plato expressed his views on education in his writings, particularly in his Republic.

Aristotle was the teacher of Alexander the Great. In the Lyceum, which Aristotle organized, he trained Athens' young lawmakers and statesmen. The curriculum of the Lyceum consisted of biology, history, and political science. Aristotle stated that the curriculum for a child should consist of instruction in reading, writing, gymnastics, music, and drawing, emphasizing particularly physical training, reading, and music.

Rhetoric and physical training were subjects of emphasis for Roman boys. During the earliest period of Roman history the Roman boy was educated by his father, and probably in a meager way. Then, during the first two centuries of the republic, a Roman boy was taught by his father to show reverence to the gods and to read. Through his father's instruction he became sufficiently familiar with Roman law so that he would know his obligations under it. He also learned the rules of courtesy. But there was nothing very intellectual about education in early Rome.

From 300 B.C. the Roman boy was usually taught by a Greek slave. After the fall of Greece it was not uncommon to find learned Greeks serving as slaves of wealthy Roman families. These Greeks had the ability to

read and were familiar with Greek literature. In addition they had some scientific knowledge. Most of the Roman aristocrats were warriors and the Romans did not yet have a literature comparing with that produced by Greece. The Roman household, as a result profited much by having the educated Greek in its midst. He taught the Roman boy. In addition to this family type of instruction, groups of families might join together in employing a particularly well-qualified Greek to instruct their boys. Nevertheless, the attempt to fasten Greek culture on the sons of Roman warriors seems not to have been very successful. On the other hand, physical training of a military type and for military purposes was provided and received

a great deal of attention.

Marcus Fabius Quintilianus, better known as Quintilian, was a Roman rhetorician who was born in approximately the year 40 A.D. and lived until about 118 A.D. He lived during an enlightened period of Roman history. He was a successful teacher of Roman boys, teaching rhetoric for 20 years to the foremost youth of Rome. Among his pupils were Pliny the Younger, who became a famous orator, statesman, and writer, and two grand-nephews of Domitian, the last of the rulers of Rome to be known as a Caesar. Literary criticism was brought to its zenith by Quintilian. He is regarded as the father of classical education. He can, therefore, be regarded as the chief early proponent of the classical curriculum. He is well known for his Institutes of Oratory, an extensive work on the training of orators. It is a survey of rhetoric in twelve books. In this lengthy treatise, written in what is considered a superb example of Latin, Quintilian discussed methods of literary training and emphasized the importance of studying Greek grammar. He believed that a young orator should study Greek, not so much for its content as for the training which the study of Greek yields. This thought, of course, has permeated curriculums during much of the time subsequent to the rediscovery of Quintilian's work several hundred years ago. Since 1567 at least two Italian, two English, one German, and four French translations of it have been made. An English translation fills approximately 1,000 pages in small print.

Quintilian regarded the teaching of literary style as significant, and he thought, as did Plato, that a liberal education should include instruction in geometry and music. Quintilian's Institutes of Oratory is not only a manual dealing with the training of public speakers but is also an outline for a liberal education. It deals with the education of children, values derived from different subjects which are taught, personal qualifications for success in teaching, methods of teaching, and the like, and includes many theories of education which are current today. For Quintilian the purpose of education is to train men to become citizens who have intellect and character. He advocated a liberal education so as to develop a many-sided mind. These attitudes were in line with the thinking of the humanists of western Europe who were emerging from the Middle Ages, about 15 centuries after Quintilian's death, into an era which demanded qualities

of leadership. During considerable parts of the last three and a half centuries, Quintilians' *Institutes of Oratory*, has been a standard textbook for the use of teachers.

After the Roman Empire had enjoyed nearly 500 years of supremacy, its government degenerated and the empire was weakened. The empire was over-run by barbarians from approximately 400 A.D. to 1,000 A.D. Much of culture was destroyed and orderly government in Europe was almost

nonexistent for part of this time, but Christianity spread.

Those who overran the Roman Empire were so primitive, ignorant, and incompetent that they failed to retain intact what they seized, much as a baby does who grasps for a beautifully printed and artistically bound rare book and chews and tears it to pieces. Western civilization dropped to such a low ebb that only a few writings—and those in bad Latin—are available to give a picture of western Europe during the five centuries, 500-1000 A.D.

The period of Charlemagne, who lived from 742 to 814, and the Moorish regime in Spain were the only bright spots in these centuries of chaos and ignorance. In the late 700's Charlemagne, a powerful leader and administrator, became ruler of much of central Europe. He established schools and spread learning in a period when little attention was being given to education. He encouraged agriculture, construction, and navigation. In addition to the Palace School, he founded a series of cloister and diocesan schools in his empire. However, in examining a book by J. Bass Mullinger published in 1877 in London and entitled *The Schools of Charles the Great and the Restoration of Education in the Ninth Century*, one concludes that the curriculum of Charlemagne's schools scarcely went beyond grammar, orthography, logic, theology, arithmetic, and astronomy, and that philosophy was handled badly.

From the days of Charlemagne to the middle of the sixteenth century, the curriculum of European schools, and European thought, were dominnated first by scholasticism and then by humanism. Scholasticism originated in Charlemagne's cloister and diocesan schools and after his death the scholastics grasped for Greek learning, to make use of it for their own purposes. Scholasticism influenced Europe mightily from approximately 850 to about 1453.

Universities arose in Europe during the Middle Ages and became the home of scholasticism, which was the teaching of the leading authorities on theology and philosophy in medieval times. These scholastics were concerned mainly with the effort to harmonize Greek philosophy and the dogma of the Christian Church into a system which would not contain inherent contradictions. Scholasticism, therefore, was a form of logic and a system of philosophy. In it Aristotle's philosophy, which was mainly deductive, was used to blend and systematize the philosophy of Christianity with Greek thought. Scholasticism looked upon revelation as an aid to reason. The realism of Aristotle and the supernatural part of Christi-

anity were both included in scholasticism. In contrast to scholasticism, modern philosophy has tried to separate itself from dogmatic theology and to set up a system of truth which is purely rationalistic and scientific. Leading scholastics included Johannes Scotus (810-877), Roscellinus (c. 1050-c. 1122), Abelard (1079-1142), Alexander of Hales (d. 1245), Thomas Aquinas (1225-1274), Duns Scotus (1274-1308), and William of Occam (1270-1347).

To a large extent scholasticism was unproductive formalism in thinking. The scholastics adopted the Aristotelian syllogism as the pattern for all thinking. Artificial questions were debated as a means of increasing skill in the use of the syllogism. Reasoning was deductive and proceeded from an accepted premise. Prolonged and precise debate characterized the Middle Ages. The scholastics emphasized logical reasoning, whereas

modern research emphasizes fact finding.

There is something to be said in favor of scholasticism, for it taught a certain type of intellectual preciseness. Scholasticism has had numerous advocates from the Middle Ages to today and, therefore, has had a marked influence on curriculums. The teaching of logic in colleges for centuries and "mental" arithmetic in the eighth and ninth grades of American public schools especially during the period 1870-1900, and a rather consistent emphasis on debating in high schools and colleges in the United States during the last 50 years can probably be attributed to the influence of scholasticism. The system of reasoning used by the scholastics is found in the curriculum of Catholic schools at the elementary, high school, and college level. Scholasticism's principles of logical reasoning are used in teaching the subjects which comprise the law curriculum in the United States.

The years 850 A.D.—1000 A.D. were the time of greater ignorance in western Europe. Very few of its inhabitants then knew even that a highly developed civilization had formerly existed at Rome and Athens. Nor did they know much about the civilization existing in their own day at Constantinople and Baghdad. However, Arabian art and wisdom probably began to brighten Europe a bit at about the time of Charlemagne. From the seventh to the fifteenth centuries the Arabs engaged in conquest and in doing so established many centers of civilization and promoted science and art as Alexander the Great had done in his time. The Moors of Africa had been conquered by the Arabs in the seventh century. They were converted to Mohammedanism. They adopted Arabian manners, customs, and a corrupted form of the Arabic language. In 711-714 the Moors seized nearly all of Spain and dominated the country for approximately three centuries and remained for four more before losing Granada, their last Spanish stronghold, in 1492.

During the period that the Moors were in control of Spain, the civilization of that country far surpassed that of other European countries. Irrigation was used successfully and learning received attention. Communication between countries was slow, and Christian Europe was not eager to hobnob with Mohammedan Spain. In part, for those reasons, Moorish influence on European curriculums developed slowly. Alcuin (735-804) an English monk whom Charlemagne had employed to conduct his Palace School, which was attended by Charlemagne's sons and by other princes of the royal group, taught arithmetic based on Roman numerals, and a clumsy system it was.

After the Moors left Spain and Christians gained control of the entire country, Arabic numerals replaced Roman and the study of mathematics, literature, and medicine was more noticeable in Europe generally than since the fall of the Roman Empire. Medieval universities began to

appear on the European scene.

After the dissolution of Charlemagne's empire, Europe's feudal system arose in countries other than Spain. It was based on might and resulted in much warfare between feudal lords. A large proportion of the people became serfs and had an extremely low standard of living. Little emphasis was given to education. Only the privileged classes had the benefit of educational opportunity. There were schools for knights. The curriculum in these schools provided for instruction in riding, hunting, and the conducting of warfare. There were schools which were controlled by the church. The medieval universities grew out of monastic and cathedral schools. These institutions of higher learning taught law, medicine, and theology. Curriculums in the Middle Ages gave little attention to the natural sciences. Roger Bacon (1214?-1294) of England pointed to the necessity for including mathematics in the curriculum and engaging in scientific experimentation. He himself had used both a telescope and a microscope in search of knowledge.

During the feudal age, Christians from western Europe made several military expeditions known as the Crusades, between the eleventh and fourteenth centuries, to recover the Holy Land from the Turks. The Crusades and travels from Europe to the Far East, especially Marco Polo's famous trip ending in 1295, brought about a rise of commerce which in turn produced significant cultural changes. Merchants of Venice, Genoa, Milan, and other cities in Italy prospered in trade between Europe and Asia. A wealthy middle class appeared which helped to raise western Europe's cultural level. The rise in cultural level stimulated education and education created an interest in ancient civilization. Italian cities became centers of learning where Greek and Roman civilization were studied. Scholars came to Italy to study the language and literature of the Greeks and Romans. In turning attention to ancient civilization, people cast off the

long-accepted scholasticism of the church.

The rivival of learning (the Renaissance) had a direct influence on the curriculum. Boys, and some girls, were being instructed in classics and mathematics no matter how they might spend the remainder of their lives. This emphasis on classics and mathematics was wide-spread. Correlation between the curriculum and the student's future apparently was not given much thought.

In studying ancient literature, scholars started studying man as a human being. Consequently, they were referred to as the humanists. The greatest of these was Desiderius Erasmus who was born in Rotterdam, Holland, probably in 1466. He wrote extensively and his writings spread a humane philosophy of life. He taught that people should be intelligent, openminded, and interested in the welfare of humanity. He exerted an important influence on European and English thought, and, consequently, on

European and English curriculums.

Humanism concerns itself predominantly with affairs of mankind rather than with the supernatural or the abstract. Western Europe's humanism in the fifteenth century pushed aside the scholastic theology and philosophy of the Middle Ages and searched for and examined the ancient classics. This humanism was a revolt against church authority and led to modern intellectual, scientific, and social developments. In general, the humanism of the fifteenth century was a gradual rather than a violent breaking away from scholasticism and the authority of the church. The humanists were much interested in the individual and the abrogation of submission of the individual to institutions. The humanists actually were not much more interested in scientific investigation than were the scholastics, and, therefore, the humanists of the 1600's did not push quickly for science in the curriculum.

The weakness of university curriculums in the latter Middle Ages was caused by too much emphasis on philosophical speculation. The weakness of education during the next epoch, the Renaissance, can be traced to the fact that although much attention was given to classical literature very little was given to science, even though facilities were already available for

a considerable amount of primitive scientific investigation.

At about the time of Erasmus, a number of new universities came into existence in Europe and England. There was a new interest in art, geography, exploration, and natural science. John Gutenberg (c. 1400-1468) invented the process of printing from movable type and Columbus discovered America. Books were now being printed instead of copied by hand and a much larger proportion of the people than previously learned to read. Through reading they began to catch the spirit of freedom which the Renaissance brought and began to broaden their horizons. People in general were now learning about places and times other than their own. A new era in the world's history was in the making. This new era enlarged the number of persons who were to receive education. Curriculums in Europe and England were expanding. Education was on the move and modern times were being ushered in.

After the Reformation doctrinal instruction became increasingly important among both Protestants and Catholics, and naturally, was reflected in the curriculum. Ignatius Loyola (1491-1556) was a Spaniard. After being wounded in a battle with the French, he pledged his life to the church and led a movement for reform within the Catholic Clergy. He founded an order known as the Society of Jesus (the Jesuits), which

throughout its history has been a teaching and missionary order. It founded schools and colleges. The Jesuit colleges, founded by the Society, were highly organized. The curriculum was carefully planned and was designed to prepare some students to become Jesuits and others to become governors and military leaders.

The curriculum of the Jesuit colleges was prescribed in the Ratio Studiorum (Ratio atque Institutio Studiorum), a code of rules for Jesuit education. This code was published in 1599, after fifteen years of intermittent effort to fashion it. The Ratio Studiorum emphasized the study of Latin, Greek, and religion. Science and mathematics were included as subjects of less importance. When students were to be sent to foreign missionary fields, a "foreign service" curriculum was included in order to prepare for duty in a distant land.

In a chapter entitled "Education and Learning" in a comprehensive book entitled The Jesuits in History, the Society of Jesus Through Four Centuries, 1941, Martin P. Harney discusses the Ratio Studiorum. The purpose of the Ratio was to produce learned religious gentlemen of broad culture. It aimed at educating the whole man from the point of view of the Catholic Church. The curriculum contained in the Ratio Studiorum was primarily a classical curriculum, literary in the lower classes and theological and philosophical in the college classes. Its authors selected from existing curriculums. They were scholastics and their Ratio Studiorum reflected scholasticism very decidedly but also included a fusion of humanism. The curriculum of Jesuit institutions today is still based on scholastic philosophy and on the classics. Through the Ratio Studiorum and their hundreds of colleges and universities which used it, the Jesuits have had a significant influence in perpetuating the classical tradition in modern education.

The Jesuit curriculum was divided into two large segments which might be termed preparatory and college. In the preparatory, Latin and Greek were the foundation studies. Geography and history were given some attention but only as complements to the classics. There were five classes as follows, but they could be adapted to suit local conditions:

- 1. Lower Grammar-rudiments and elements of languages
- Middle Grammar—a broader knowledge of grammar; included simple readings
- Superior Grammar—extensive knowledge of grammar; included more advanced readings, and practice in versification
- Humanities—advanced readings and preliminary training in rhetoric so as to develop fluency and prepare for eloquence
- Rhetoric—extensive study of the subject, including oratorical and poetic composition

For curriculum at the college level, the Ratio Studiorum provided philosophical and theological courses, the theological courses being based on the works of St. Thomas Aquinas. Aristotle was the standard author in philosophy in the Jesuit schools. The student was taught philosophy

after he received instruction in the humanities and had been filled with the choice parts of Greek and Latin literature. A three-year curriculum in philosophy consisted of the following:

First Year-introduction to philosophical studies; minor and major logic

Second Year-metaphysics

Third Year—special metaphysics, rational psychology, and ethics. The psychology was of the Plato and Aristotle variety. It consisted of theoretical and philosophical speculation in contrast to the scientific method used by psychologists since about 1875.

In 1615 there were 372 Jesuit colleges in the world, in 1710 there were 612, and immediately before 1773 there were 621. These schools, which would compare somewhat to our present junior college, were found in Italy, France, Germany, England, Latin America, the Philippines, and Asia. They were spread from Brazil to Japan. In the middle of the 1700's,

they had an enrollment of approximately 300,000 students.

In 1820 there was an attempt to revise the Jesuit curriculum of 1599. This led to the tentative, but not mandatory, revision of 1832. The tentative revision of 1832 has remained to the present decade, in spite of attempts to alter it. The 1832 revision called for the addition of two-years' study in ecclesiastical history and in canon law to the theological course. As to the philosophy course, Aristotle was not to be given pre-eminence. An increased amount of mathematics and physics was to be taught; chemistry and astronomy were to be added. The language of the country in which the college was located was to be a major subject in all classes. History, geography, and elementary mathematics, too, were to be given emphasis. The classics were still to retain their former prominence.

The Catholic Church gained, through Loyola's work, a society which continues to have a great deal of influence over Catholic educational activities. During Loyola's lifetime, Johannes Sturm, mentioned previously, did much to promote secondary education among the Germans and to fasten upon it a classical curriculum. His most important work was done at the gymnasium which he founded at Strasburg in 1538 when he was a young man. Sturm's school was influential. It became the model of the twentieth century gymnasium of Germany, which corresponds to the grammar school in England, the lycee in France, and somewhat to the high school in the United States, although the gymnasium provides its students with instruction over a nine-year period.

Through his organizing ability and his writings on organization and mehtods of education, Sturm had a large part in shaping educational development in cities other than Strasbourg and in different countries.

As late as 1935 the curriculum of the German gymnasium was largely classical and literary and much narrower than that of the high school in the United States. In 1935 the subjects taught in the German gymnasium included Latin, Greek, religion, history, mathematics, geography, writing,

natural history, and, as would be expected, German. Yet, some of these subjects, for example, general history, were given only slight attention, and the study of Latin was extremely intensive, for the graduate was expected to be able to read with ease Latin text selected at random.

Johannes Sturm was devoted to the classical tradition of his time, was an excellent organizer, and a rigid disciplinarian. One has the uncomfortable feeling that in advocating the classical curriculum he was indulging his preferences rather than attempting to consider objectively the curriculum needs of students. Yet, something must be said in favor of the study of Latin in his time. It was the principal language of the Roman Empire and became the foundation of other languages such as French and Spanish and to a substantial extent influenced German and English. It was one of the greatest languages of culture because of its facility for conveying thoughts and precise meaning.

Today Latin is almost a dead language as it is used only by a decreasing number of classicists and by the Roman Catholic Church. In Johannes Sturm's lifetime, Latin was the universal language of western European civilization and was the language of diplomacy and of law codes. One could not then make a prominent career in Church or State or be admitted into high intellectual circles without fluency in Latin. Both Catholic and Protestant schools then placed much emphasis on Latin. History, geography, and the natural sciences were neglected, and the social sciences were scarcely known.

From the time of Sturm in the 1500's, the classical curriculum has placed emphasis on the study of the language and literature of foreign countries—principally Latin and Greek. The study of foreign language and literature has advantages. The study of languages provides an intellectual discipline which is valuable for those whom it does not frustrate. The study of literature presumably puts at the student's command the choicest bits of recorded wisdom. The study of foreign languages and literature broadens the horizon of both teacher and student and promotes international understanding and appreciation, which is much needed. Furthermore, the rhetoric which is woven in with the teaching of language and literature helps greatly in developing articulate citizens, an objective which Quintilian deemed essential.

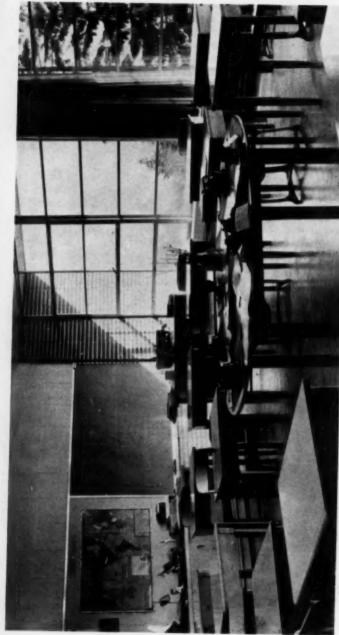
The classical curriculum has had its vigorous proponents for many generations. Numerous arguments in its behalf are set forth in a book by R. W. Livingstone entitled A Defense of Classical Education, published in London in 1916 by MacMillan and Company.

The classical curriculum places emphasis on the humanities and only slowly gave attention to the natural sciences and rather recently to the social sciences. Yet the German states (now Germany) a stronghold of the classical curriculum, became one of the leading centers of scientific discovery and technological progress and three times, since July 1870, those states turned on and struck at humanity.



Could This Happen in Your Community?

The pupils enrolled in this Pittsburgh school narrowly escaped death when sames swept through the building. Because of being dismissed early for their annual Christmas parry, they avoided being trapped in this conflagration.



Classrooms of This Type, Equipped with Movable Tables and Chairs, Can Be Adapted Readily To Meet the Requirements of Many Kinds of Instructional Activity

The interest of the community in schools and the availability of modern textbooks, up-to-date laboratory equipment, a good library, and various other teaching aids in comfortable, safe, clean, well-kept buildings designed for school purposes assist in providing an atmosphere for vital learning. The furniture in this modern classroom can be moved about with ease. The center table can be pushed into a corner when not needed, or can be made smaller by dropping its leaves. Late in the life of Johannes Sturm, in 1570, a book entitled *The Scholemaster* appeared. It was written by Roger Ascham (1515-1568), an Englishmen well-known for his mastery of Greek and Latin, and was published by his widow. This interesting educational work deals with the teaching of Latin, but also stresses the value of physical education, which makes the book of particular interest to those who trace the development of twentieth century curriculums.

Francis Bacon (1561-1626), versatile Englishman of Queen Elizabeth's court, stirred up an interest in the idea of studying science by observing and by handling objects, and by scientific investigation resulting from observing and handling, rather than by accepting published statements. Bacon's writings in line with this point of view probably had quite a bit to do with the later inclusion of laboratory activities in the curriculum.

As we have seen, the traditional European classical curriculum stressed the study of Latin and Greek and minimized the study of history and science. This curriculum found many ardent advocates and has survived rather largely in Europe to the present time, although it has waned somewhat in the last 15 years. Yet, as early as the seventeenth century it was being criticized severely. John Locke (1632-1704), a famous English philosopher and realist, was one of the first to urge a type of education which is not based on the rigid classical curriculum of the 1500's. He wrote a book entitled Some Thoughts Concerning Education. In this small but significant volume Locke stated how he believed young English gentlemen should be educated. The book protests against slavish use of books and the knowledge secured from them and points to many principles for personal development which can be read with profit today. Instead of having young men concentrate almost entirely on learning languages, Locke recommended that they travel and acquaint themselves with things in the world about them. Since Locke himself had lectured at Oxford on Greek, rhetoric, and philosophy, 1660-1664, his attitude toward the classical curriculum was not a matter of sour grapes. It can be viewed as a matter of conviction.

In 1927 a large book by Franz Gundlach was published at Marburg (Hessen), Germany. By persuing its pages one can obtain quickly a curriculum cross section of considerable value. The book deals with Marburg University at Marburg in the state of Hessen in present West Central Germany. This institution was the first Protestant university in the world and has continued to be an important center of learning. It attracted to its faculty and to its student body persons from many parts of Europe. Gundlach's book, printed in German with the following title in Latin, Gatalogus Professorum Academiae Marburgensis, gives biographical sketches of faculty members of Marburg University from the time of its founding in 1527 to 1910, a period of almost four centuries. The book is an important source of history of education of the German people.

Gundlach's book indicates the following interesting facts about the curriculum. In 1527 Marburg University had seven professorships, each held by a different person. One was professor of poetry; a second was professor of history; a third was professor of Greek; a fourth was professor of mathematics; a fifth, of medicine; a sixth, of theology; and a seventh was professor of civil law. The existence of these separate positions seems to indicate that much attention was given to each of these seven subject matter fields. In 1533 this university had professors of dialectics, rhetoric, and physics; in 1536, a professor of moral philosophy; in 1546, a professor of poetry and logic; in 1548, a professor of logic; and in 1566, a professor of ethics. The faculty included a professor of theology in 1576, and in 1580 a professor of Greek and a lecturer on law. Five years later the university conferred the degree of Doctor of Jurisprudence. In 1592 there was a professor of mathematics and also a professor of theology at Marburg, and in 1605 a professor of logic and metaphysics, and a professor of French and Italian language, and four years later a professor of chemistry, Johannes Hartmann, probably the first to occupy a chemistry chair in Europe or elsewhere.

In 1618 Marburg had a professor of theology; in 1626, a professor of ethics; and the next year, a professor of theology and Hebrew. In 1628 it had a professor of logic and metaphysics. A professor of logic, metaphysics, and physics was on the faculty at Marburg in 1653. In 1662 a professor of church history and Greek and in 1672 a professor of Hebrew were at Marburg; in 1676 the institution had a lecturer in philosophy.

Maximilian Percelli, famous in his day, was professor of practical philosophy in 1681. His professorship of philosophy included ethics and politics. Three years later he was professor of eloquence and history, including "profane and church history." In 1697 he "occasionally taught" historical and physical geography. During Percelli's time at Marburg, law, mathematics, and theology continued to be represented by professorships. In 1682 the university had a professor of law, in 1688, a professor of mathematics; in 1692, a professor of canon law; in 1693, a professor of theology; and in 1703, a professor of law. In 1709 the Doctor of Jurisprudence degree was again conferred. In 1710 Marburg still had a professor of logic and metaphysics.

Jacob van den Velde was called to Marburg University as professor of medicine. From 1714 to 1728 he lectured on pathology, therapy, and physiology. From 1723 to 1728 he lectured on materia medica.

In 1747, as in Percelli's time, Marburg had a professor of practical philosophy. Gundlach calls attention to a professor of physiology, surgery, and pharmacology at Marburg in 1781 and to a professor of botany on its faculty in 1786. The next year Marburg had a professor of economics and the science of finance. In 1787 its faculty had a professor of military science.

In 1790 Marburg University was recognizing the science of education as an emerging field, for in that year it had a professor of philosophy and

pedagogy.

One Georg Theodor Christoph Handel apparently had his hands full at Marburg in 1791. In that year he was professor of medicine, pathology, therapy, semiotics, anatomy, physiology, hygiene, venereal disease, history of medicine, and forensic medicine. He remained but one year! In 1797 there was a professor of mineralogy and geology at Marburg, which evidences a branching out to an interesting and modern-type curriculum area. In 1807 Marburg had a professor of zoology.

The classical tradition was still receiving emphasis at Marburg University in 1810. Gundlach shows that a professor of Greek and Roman literature was then on its faculty. Advance in concepts concerning curriculums and schooling in general is found in Marburg's having a professor of pedagogy in 1833 rather than attaching pedagogy to the coat tails of

a chair in philosophy, as in 1790.

Still further curriculum expansion in the Europe of approximately a century ago is attested by Marburg's having a professor of hygiene in 1857, a professor of geography in 1876, a professor of psychiatry in 1877, and a professor of sciences auxiliary to history (chronology, heraldry, etc.) in 1889.

Franz Gundlach's book gives much additional information about European curriculums. It tells of Marburg faculty members receiving degrees from other universities and indicates institutions other than Marburg at which Marburg faculty members taught, and the subjects which they taught. From the book it is learned that, of Marburg University's early teachers, one received a Master of Arts degree from Tubingen University (in present Germany) in 1567; one lectured on law, dialectics, and rhetoric at Geneva, Switzerland, in 1576; one received a Doctor of Theology degree from Tubingen in 1576; and one a Doctor of Jurisprudence degree from the University of Basel, Switzerland, in 1580.

Quite a few of Marburg's early faculty members taught also at Herborn "hohen schule" (a school which was probably between the secondary and university levels (and at Cassel University. The school at Herborn was approximately 100 miles from Marburg, whereas Cassel University was about 50 miles from the Marburg institution. The three locations are in the area that was known as the American zone of Germany, following World War II.

In 1588 a one-time member of Marburg's faculty was professor of law at Herborn hohen schule, in 1676 another was professor of practical philosophy at the Herborn institution, and in 1690 one was professor of theology, Hebrew, and church history at Herborn.

Cassel University, now long since out of existence, had a professor of theology, Hebrew, and philosophy in 1629. The next year it had a professor of eloquence and poetry, and in 1635 a professor of physics.

One of the Marburg faculty members had been a professor of Greek and philosophy at Heidelberg University in 1681, one had received the Doctor of Theology degree from Heidelberg University in 1686, and one had been professor of theology at Heidelberg in 1692. Another member of the Marburg faculty had been professor of theology at the University of Giessen in present Germany.

Now let us turn aside from curriculums of higher education and consider the elementary curriculum and the impact made upon it by the transition from authoritarian to child-centered concepts.

From the latter part of the 1700's there has been a curriculum trend, slow at first, toward the objective of training children to make useful contributions to society by giving special attention to the particular abilities of the child and by developing his or her impulses for good. The concept exerts an important influence on curriculum development today. The thinking of Comenius in the 1600's, of Rousseau (1712-1778), of Pestalozzi (1746-1827), and of Horace Mann (1796-1859) was especially significant in shaping this trend.

Jean Jacques Rousseau of France wrote two books which shook the Europe and England of his day. One, the Social Contract (1762), was a political essay pointing out that the right of governing results from the consent of those who are governed. This book probably had more to do than anything else with the precipitation of the French revolution.

Rousseau's other famous book is entitled Emile. In it he stated his educational philosophy by giving the life history of a boy pictured as being educated properly. Rousseau took the point of view that all things are good as they come from the Creator's hand, but that man destroys the natural goodness of things. The opening sentence of Emile is as follows: "God makes all things good: man meddles with them and they become evil." A return to nature is, therefore, advocated by Rousseau. If one is to be educated properly, he must be taken away from association with society. He should not have his nose thrust into books, in fact should not even see books, until he is mature enough to do quite a bit of thinking for himself. Instead of spending time in contact with institutions of society, the child should roam in the open country and in the woods and absorb such knowledge as will satisfy his natural curiosity. So that the child will be able to benefit from the accumulation of human knowledge, and yet not be contaminated with accumulated prejudices, he should have at his side a sympathetic tutor who would help answer the questions which arise spontaneously in the child's mind. Rousseau felt that the child, upon reaching a certain stage of maturity, should be guided to see the need of acquiring a skill which could be put to vocational use. After this second stage, the child was to be brought back into society and introduced to books and men, now being able to adjust to social conditions owing to the early civilization of his mind and body.

The book was written in such an engaging style that it became a best seller. Its point of view was widely adopted in Europe as both a philosophy of life and a plan of education. In many parts of Europe the curriculum was changed almost as soon as *Emile* appeared so that children could be educated through the informal means suggested by Rousseau. As a result of his writings there was a tendency to modify school practice so as to give increased freedom and to recognize the natural impulses of the child.

Emile, so fascinatingly written, has been published many times, in French, German, and English, since it first appeared in 1762. An English translation in Everyman's Library runs 444 pages in small print, and is easily obtainable at small cost.

The name Pestalozzi is mentioned frequently in discussing education. This native of Switzerland, Johann Heinrich Pestalozzi, had much to do with curriculum development in Europe, but is probably better known today for his genius in devising teaching methods than for his influence on selection of subjects to be taught. One of the world's greatest educational reformers, Pestalozzi was an inefficient administrator, was unsystematic, and in personal affairs was unfortunate. Yet, as in the case of Rousseau, a book of his shook Europe. It was first published in 1781 and was entitled Leonard and Gertrude. It tells about the wretched condition of an impoverished Swiss family. The family lived in the village of Bonnal, Switzerland, and barely existed, as Leonard, a mason, squandered his money on drink and gambling. Nevertheless, the mother, Gertrude, a woman of fortitude, undertook the task of instructing her seven children. Pestalozzi describes her as having such genius in getting her children to perform simple domestic and industrial operations that with their help she improved the condition of her family and the entire village. She did this by organizing the activities of the children and simultaneously teaching them to learn about all which surrounded them. While they worked she read to them. She emphasized the everyday facts of life and explained their meaning. Through this intellectual clarification of life facts in connection with activity, the mind was trained, the moral tone of the home and the village was raised, vocational skills were developed, and the children were able to raise themselves to a comfortable standard of living, and, the easy going husband was reformed.

Leonard and Gertrude was Pestalozzi's great published work. He issued it in three different editions. It was an inspiration in a period when Europe suffered from the ravages of war and a lack of trained workers. An effort was made in most of Europe by rulers and religious leaders to raise the common people up to the description in Leonard and Gertrude.

Pestalozzi's Leonard and Gertrude attracted attention in America at an early date. The Library of Congress has a copy which was published in Philadelphia in 1801 in the form of a 276 page book with the following explanation on the title page, "A Popular Story, Written Originally in German; Translated Into French, And Now Attempted In English; With The Hope Of Its Being Useful To All Classes Of Society." In 1859 Pestalozzi's first edition of Leonard and Gertrude was published in the American Journal of Education and in 1885, 1892, and 1897 the work was again published in the United States in book form but abridged. As a complete edition it is bulky and rather uninteresting.

In the United States Pestalozzi's teachings were reflected in the curriculum at the Normal School at Oswego, New York. There, in the 1860's, Edward Austin Sheldon (1823-1897), a superintendent of schools in Oswego and principal of the Normal School, enthusiastically put into use Pestalozzi's ideas of education. Under Sheldon's leadership the Oswego

Normal School attracted much attention.

Educational thought in Europe during the years following Rousseau and Pestalozzi was directed toward the preschool child as well as toward older children and youth. The kindergarten was started in 1837 in Germany by Friedrich Froebel, a student of Pestalozzi. It was set up for children four to six years old. The kindergarten, a German word meaning garden of children, spread rapidly through Europe and to England and the United States. Froebel co-ordinated play materials—paints, modeling clay, and the like—with songs, stories, and games in order to develop the preschool child.

Maria Montessori, an Italian born in 1870 who died in Holland on May 6, 1952, also had a tremendous influence on the education of preschool children. The object of the Montessori schools which sprang up in various countries was to develop the initiative of children through liberty of individual action, under the guidance (not domination) of a teacher. In these schools, play and work, hand and mind, are linked so as to train senses and muscles and thus co-ordinate thought and action. Exercises and games are used. The children are encouraged to discover a sense of human fellow-

ship.

Children and youth in many lands now have an opportunity to secure at least a few years of schooling, regardless of the economic status of their parents. This heartening situation developed slowly, in spite of class distinctions. Europe and England have never been lands of equality. Class distinctions are still noticeable there, although not as much so as a century or two ago. Schools for the common people of Europe and England developed after the universities and after the schools which prepared one for entrance to a university were organized. The common schools were fostered by the church. Cathedral schools gave boys instruction in reading and music so they could sing in the choir. Instruction concerning the catechism, and sometimes a bit in arithmetic, was included. These church schools grew slowly until the time of the Reformation. Martin Luther and his co-workers organized many schools for the common people who previously had little opportunity to receive an education. The leaders of the Reformation were active in developing schools to reach a large proportion of the population so that many people would learn to read the Bible themselves in their own language.

In France a religious order of monks known as the Christian Brothers developed the common school. Reading, writing, arithmetic, and religion were the subjects included in the curriculum. In England common schools known as "pauper schools" were supported by religious and charitable societies,

In the German states intelligent rulers assisted the church in providing schools for the children of the common people, for education produced improved economic and political conditions. In 1763 Frederick the Great (1712-1786), King of Prussia, required children to attend schools and insisted that instruction be given by specially trained teachers to be paid by the state. Religious instruction was not to be eliminated from the curriculum—families of different faiths were to be permitted to receive in the public schools religious training related to their faith.

In establishing public schools and making attendance compulsory, Frederick the Great stirred up a hornet's nest. But who ever stopped Frederick the Great? And time has proved that his issuing "The General School Regulation," which established the principle of compulsory school attendance for children, was a great step forward, and, also, one which created innumerable curriculum problems.

Prussian schools, as might be expected, were soon well organized. In 1833 children from the ages of six to 14 were attending. Gradually the curriculum of Prussian common schools was supplemented with industrial education so that children could be trained in the trades. Prussian schools became the pattern for school systems throughout Europe, and to some extent for school systems in the United States.

During much of the present century the so-called public secondary schools in England have emphasized the study of Greek and Latin as a means of developing the type of mental concentration and discipline necessary to become successful as civil service employees and army officers. The classical curriculum has had staunch advocates over the centuries. Nevertheless, the value of the classical curriculum has long been challenged. In the last fifty years the social sciences have been emphasized. During the same period there has been a swing from ancient to modern languages and repeated stress on modern rather than on ancient civilization.

Many educational reformers believe that the study of science and modern literature instead of the Greek and Latin classics furnishes mental discipline and in addition provides the information one needs in order to take an intelligent part in the activities of modern society. Herbert Spencer took this view. In 1861 he published four essays on education which were a strong plea for including science in the secondary curriculum and a forceful attack upon the traditional classical curriculum. The first of these essays was entitled "What Knowledge Is of Most Worth?" In the essay he places high value on scientific knowledge, stating that it is much more significant than training in the classics. He criticized severely schools as failing to prepare children for the practical requirements of life. His second essay dealt with principles of learning and teaching. The third

concerned itself with moral training. In it Spencer contended that two elements are necessary in order to justify punishment of the child—it must follow nature's pattern, and give training which will assist in adapting to environment. The last of Spencer's four essays of 1861 on education urged improved physical training for school pupils.

These four essays were read widely. They received attention in his native England, but they probably had more effect in the United States than in Spencer's own country since the classical curriculum was less entrenched here than in England. These essays did much to shape the development of the scientific curriculum in the United States, both on the high-school and on the college level. In addition, Spencer's interest in social problems and his wide influence had much to do with the introduction of Yourses in political science and sociology in American colleges and universities.

CURRICULUM EXPANSION IN AMERICA

When the first settlers came to America from Europe in the early 1600's, most people in the homeland of these settlers could not read or write. Free public education for all children was then scarcely envisioned. Some of the New England pioneers had received a university education before embarking for America. They started a movement for schools in this country. The Boston Latin Grammar School, usually referred to as the Boston Latin School, was founded in 1635.

Latin grammar schools were originated by the Romans and were patterned on some of the Athenian schools. During the Middle Ages these schools faded almost entirely out of sight but reappeared prominently during the Renaissance. They spread to most countries in Europe and to the English colonies in America. Among the Germans in Europe, the Latin grammar school was known as the gymnasium, referred to previously.

The Latin grammar schools of 1635 were secondary schools which emphasized Latin and usually included Greek. These schools existed with the purpose of preparing young men to enter college. The year after the Boston Latin School was founded, Harvard College was established. In its early period, emphasis was placed on the preparation of men for the ministry and the law.

Elementary education also received the attention of the early New Englanders. The Massachusetts General Assembly passed a law in 1647 which required towns of fifty families to maintain an elementary school and towns of 100 families to have a secondary school. The New England elementary school taught children to read so that they could understand the Bible. A bit of simple arithmetic was also included in the curriculum.

At the secondary level, reading, writing, and arithmetic were taught in the Boston Latin School and in other Latin grammar schools, but this type of school had a curriculum which consisted mainly of the classical languages, with special emphasis on Latin. The curriculum of the Latin grammar schools was narrow and not well adapted to the needs of boys in a comparatively primitive land. Even so, by 1700 there were thirty-five of these schools in New England. The Latin grammar school spread to most of the thirteen colonies.

The breadth of Benjamin Franklin's thinking has seldom, if ever, been surpassed. His ideas on education, as on many other phases of life, are significant. He probably understood the value of education and appreciated its necessity better than did any of his contemporaries in America and in Europe. In 1749 Franklin published an essay entitled "Proposals Relating to the Education of Youth in Pensilvania." This essay is reprinted on pages 149-181 of Educational Views of Benjamin Franklin, edited by Thomas Woody and published by McGraw-Hill Book Company, Inc., in 1931. In the essay, Franklin suggests the establishment of an academy in Philadelphia and outlines a curriculum for it. The academy was founded and from it grew the University of Pennsylvania.

The essay indicates that the wise Franklin realized the desirability of much learning, but that, in relation to the amount of useful knowledge in existence, the time for one's schooling is very limited. In the essay he put the curriculum problem this way:

As to their studies, it would be well if they could be taught everything that is useful, and everything that is ornamental; but art is long, and their time is short. It is therefore proposed that they learn those things that are likely to be most useful and most ornamental. Regard being had to the several professions for which they are intended.

Then Franklin proceeded to enumerate the components of a curriculum for the proposed academy. It was to consist of penmanship, drawing, and arithmetic, together with some of the first principles of geometry and astronomy, English grammar, English classics, reading aloud, writing letters and stories, public speaking and history, including attention to chronology of leading world events, and explaining of ancient customs. Morality was to be emphasized through the teaching of history. Geography and logic were also included in the curriculum. In addition, the following courses were suggested by Franklin for ornament and professional preparation-for the ministry, Latin and Greek; for the physician, Latin, Greek, and French; for the lawyer, Latin and French; for merchants, French, German, and Spanish. Furthermore, Franklin inferred that while the students are reading natural history they might well be taught, and practice, a bit of gardening, planting, and grafting and make an occasional visit to the best neighboring farms to observe the methods of agriculture employed. He suggested adding economic history and principles of mechanics to the list of subjects.

This proposed curriculum indicated a desire to provide a broad education for businessmen as well as for ministers, lawyers, and physicians. It also pointed education toward the requirements of the daily life of persons in any responsible position in Franklin's day. This 1749 proposal definitely was not a Greek and Latin form of intellectual discipline.

The picture of American education has changed vastly during the last 200 years. The Latin grammar school was followed by the academy, and the era of the academy by the public high school, which in recent years has divided into the junior and senior high school. The public elementary school came into existence in every state. Parochial elementary and high schools evolved. Some colleges developed into universities and both colleges and universities increased tremendously in number, and in scope of curriculum offerings. The teachers college, the junior college, and various types of public and private technical schools, with their respective curriculums, came on the scene.

In Benjamin Franklin's day, a large number of people in America could neither read nor write. There were tuition schools which were attended by the children of the wealthier families. In the face of practical curriculum suggestions, such as Franklin's, school offerings were not meeting the needs of a considerable part of the population in the late 1700's. In the East the grammar schools were limiting themselves increasingly to college preparation. As people pushed farther into the interior and established towns, most of the families found it difficult or impractical to send their children back East to school. Gradually the academy arose. Its curriculum included the classics, but emphasis was placed on English, mathematics, and general science, though then known as natural philosophy. At first education in the academy was a co-operative and relatively inexpensive matter. Providing board and lodging for the school master and performing janitor's duties quite frequently took care of the matter of fees.

Academies spread rapidly. Their greatest period of development extended from 1825 to 1840 and they were numerous until about 1850. In New York State they enjoyed their peak of prosperity and in that state their curriculum was extensive, including a number of courses in mathematics and a number in science. Architecture, civil engineering, bookkeeping, stenography, penmanship, religious education, biography, ancient history, United States history, English, French, Greek, Italian, embroidery, music, painting, and principles of teaching were also found in the composite curriculum of academies of New York State.

Some of the academies in various states grew into famous institutions. In their prosperity, fees rose. The town high school came into existence and provided education for those who could not afford to go to an academy. The academies disappeared or became college preparatory schools.

With the advent of Jacksonian Democracy, improvement in the means of transportation, and the rise of American industry during the first half of the 1800's came a demand for tax-supported schools. Many people began to realize that in a democracy education should not be restricted to a small percentage of the population. The view that education was to be provided

chiefly by the church and the family was being supplanted by the view that education should be a function of government and that schools for all should be provided at public expense.

Among a number of early leaders in different states in the movement for public schools, Horace Mann of Massachusetts was the greatest. He was a lawyer and member of the Massachusetts legislature. In 1837 he became secretary of the newly created board of education of his state. He found the public school system in exceedingly bad condition and changed it completely in a dozen years. In 1843 he went abroad to study educational conditions.

Horace Mann urged that schools be opened to girls as well as to boys, and to the children of the poor as well as to children of the wealthy. He insisted that school buildings be well constructed and well equipped, that teachers be trained to teach, and that schools be operated in an efficient manner. In 1842 Massachusetts passed a compulsory school attendance law, largely as a result of the efforts of Horace Mann. Other states followed the Massachusetts example with the result that today all forty-eight states have compulsory school attendance laws. This meant that the states had to provide schools and see that decisions were made as to what should be included in the curriculum.

Before the Civil War most schooling above the elementary level was carried on in private schools. The public high school was on the scene, but it was not yet generally accepted as an American institution. In 1860 there were only approximately 300 public high schools in the entire United States. In the same year there were but twelve normal schools for the training of teachers.

By the end of the Civil War interest in public education increased to such an extent that Congress in 1867 established what is now the Office of Education, to collect and disseminate information on education and to promote better education in the United States. Since 1870 the Office of Education has been collecting systematically a large body of statistics which give a reliable picture of curriculum development since that time.

In 1870 most men could earn a living with little basic education and with little technical knowledge. Today boys and girls need a considerable amount of schooling in order to maintain a decent standard of living. This change has brought about the vast increase in public education and many curriculum changes and additions at the elementary level, but particularly at the secondary level. As public elementary and high schools grew in large number, there was the question as to what they should teach. This question was not given as much careful attention as it deserved. The curriculum was fashioned mainly by adding a piece here and a patch there to the curriculum used in the New England Latin grammar schools of the 1700's, until today the high-school curriculum calls for instruction in areas ranging from Latin to automobile driving and pre-nursing.

The growth of the public high school in America has been phenomenal. It was seen at an early date that the high school should do more than prepare youth for college entrance, that it should serve more needs than

were served by the Latin grammar schools.

In 1870 only a small percentage of the nation's population continued in school beyond the elementary level. It has been stated that in the year 1870 most of the boys who went to high school did so with the thought of entering a profession such as law and that most of the girls then attending high school were preparing to become teachers. The first part of this statement seems to be open to some questioning. On July 6, 1871, J. B. Roberts, Superintendent of Schools, Galesburg, Illinois, read before the Illinois Society of School Principals, at Rockford, a paper entitled "The American High School: Its Claims and Its Work." This paper was printed by order of the Society and a copy is preserved in the Education Collection of the library of the U. S. Department of Health, Education, and Welfare, in Washington, D. C. Roberts indicated the sparseness of high schools in relation to need, and the opposition to financing high schools at public expense. He pointed out that Chicago and Cincinnati each then had from 400 to 600 high-school pupils, but were each sending to college only five to seven young men annually. He said:

The statistics of all the high schools of the West, were they accessible, would undoubtedly show but meagre results in this direction.

The lesson from these facts is this: The high school must do its own work without reference to the college, in a few favorably situated places, attaching the preparatory work to itself as an addendum. (Page 13).

The high school in 1870 and 1871 was somewhat exclusive. It was supported by a few of the larger communities, and at relatively small cost. The Kalamazoo case in the Michigan courts in 1870-72 established the legal right to support the high school by public taxation. In 1890 the high school was still looked upon as a school only for those who wished to prepare for a learned profession. Accordingly, its curriculum was of a college preparatory type and only six per cent of American youth of high-school

From its early days the American high school has held to the modern version of the classical curriculum, consisting of languages, mathematics, physics, chemistry, and history—a curriculum of the type which prepares the student for college entrance. To this curriculum of the high school, vocational and other courses have been added which are looked upon as being practical, and, therefore, regarded as of value to youth who will not enter college. Among the courses added were literature, civics, music, type-

working, auto mechanics, and machine shop practice.

age were attending high school.

With the enlargement of the high-school curriculum during the last fifty years has come a great increase in high-school enrollment, which in turn directs additional attention to the curriculum. At the turn of the

writing, stenography, bookkeeping, home economics, agriculture, wood-

century, six out of each 100 persons in the United States who were eighteen years of age were graduated from high school. By 1951-52 the figure jumped to fifty-eight per hundred. Today it is unusual for American youth of high-school age not to attend, although the drop-outs present a serious problem.

The curriculum of parochial elementary and high schools includes regular school subjects and religious training, but usually has few if any vocational courses.

Enrollments were small in the colleges of colonial America and the curriculum was limited mainly to the training of ministers. At first women were not admitted. By 1860 the number of colleges founded was 246, and by 1900 almost 500. Through the Morrill Acts of 1862 and 1890, Congress provided Federal aid for higher education. This increased the number of colleges and permitted curriculum expansion, particularly in agriculture and engineering, in many institutions of higher learning. College extension courses were added to curriculums beginning in 1906. In recent years the junior college, offering the first two years of college work, has been found in many cities. Today the curriculums of colleges, universities, teachers colleges, junior colleges, and various types of public and private technical schools, including innumerable courses, are within reach of almost anyone in America who has normal intelligence and desires to put forth his or her hand to obtain shooling.

e

n

n

C

n

0

n-

ut ry

p-

al

e-

ge

ol

rn

C8,

res

ol.

25

ot

pe-

od-

ast

in

he

STRONG FOUNDATION FOR LEARNING

In the elementary school there is need for a curriculum emphasis which will develop habits of study and thought, and a sense of social responsibility. These are foundation stones for life-long learning of a constructive type.

In an elementary school which builds a strong foundation for learning, the sixth-grade child reads with the purpose of understanding and enjoying what he reads. In writing he takes pleasure in learning the meaning of words and in finding and using those which express his ideas. He is careful to spell correctly. Through solving problems in arithmetic, he develops ability to do simple computing and reasoning such as determining the cost of wood, nails, tarpaper, and paint needed to build a house for his dog. And through solving problems in arithmetic, he receives further conditioning as to accuracy.

Many persons of high-school age and beyond do not understand what they read. This defect is due largely to the fact that reading was taught badly to them in elementary school. As children they probably regarded reading as something which had to be tolerated. They may have been compelled to follow in their book while members of the class took turns reading aloud, and poorly.

When children are taught to read so that they can find for themselves how long it takes to fly from New York to San Francisco, how sword fish are caught in Florida, how Daniel Boone traveled through the wilderness, or why Babe Ruth became a famous baseball player, they can see a good reason for learning to grasp what they read. Assigning children in elementary school to project-problems in which they are interested, such as "How are our homes protected from fire?" "How do we get electricity and how much can it do for us?" "What does the Police Department do?" and "What was our city like 100 years ago?", is an excellent way to improve reading and to develop a spirit of investigation. The boy or girl can be shown a number of illustrated sources of information concerning the project—books, magazines, pamphlets, leaflets, maps—and be asked to secure facts concerning the project. The children are then likely to read with a purpose, with the object of extracting from the books and other published sources to which they go the facts which they need.

Children who are taught reading in this way in the fourth, fifth, and sixth grades are securing a firm foundation for learning. In like manner, when they solve arithmetic problems in connection with a project which captures their interest, and write co-operatively a summary of what they have learned, or prepare, as a joint enterprise of work and of the sharing of ideas, articles for the school newspaper, they are enlarging the foundation.

A curriculum for elementary schools which allots so much time to various other activities as to give little attention to developing good habits of reading, spelling, and the expressing of ideas in writing, and whch fails to urge accuracy in arithmetic is not building a strong foundation for learning. A curriculum concept which permits the handling of these basic subjects as though they are chores, and very ordinary and unimportant ones, undermines the possibility of building a firm base for the child's intellectual development.

Whether children learn the alphabet before or after they are able to read may be inconsequential. The system used in teaching multiplication or fractions may not be important. The matter of importance is that a sense of social responsibility be cultivated in the child and that ability to read, to write, and to do simple arithmetic, and to do these well, be developed. The "three R's," readin (g), (w) ritin (g), and (a) rithmetic, are just as important as they ever were and, like sense of social responsibility, frequently receive less attention in elementary schools than they merit. The "three R's" have a definite place in the current curriculum, but now generally receive an emphasis which is more meaningful to children than the emphasis received a half century ago.

To cultivation of a sense of social responsibility, it is necessary to add a spirit of inquiry or investigation about one's environment so that a desire to contribute something worth while to it will result. When a sense of social responsibility and a spirit of inquiry are combined with competence in reading, writing, and arithmetic, a strong foundation for learning is fashioned. When these five essentials are acquired by the child

between the ages of six and twelve years, these essentials can be of great value to himself or herself and to society for many years.

On the contrary, when it is necessary for a college to build a foundation for matriculated students because the elementary school failed to build a strong foundation for learning, which was not remedied by the high school, then the matter is almost hopeless. This situation of neglect is observed daily in American colleges and universities. To expect the high school to remedy the defect caused by the neglect of the elementary school is to place too much of a load on the high school. A strong foundation for learning should be built at the elementary stage of one's organized education.

The elementary school years are probably more important than any of the others from first grade to college graduation, for three reasons: (1) in those tender years a life pattern of study and of attitudes toward others is formed to a rather large degree; (2) the fundamentals of the major subjects are learned, well or poorly, and (3) a very large percentage of children attaining school age spend six years in elementary school, whereas a fairly large proportion of them never complete high school and a large majority never go to college.

In addition to forming habits and attitudes, the elementary school provides tool skills upon which much of one's process of learning is dependent throughout life. If the elementary school does an effective job of forming good habits and desirable attitudes and developing tool skills, it is shaping constructively the entire life of the individual to a considerable extent.

Because of the importance of the elementary years, "skipping" a grade during the first six years of school should be hedged about with precaution so that curriculum fundamentals will not be missed by the child, and so that his or her problems of social adjustment will be kept to a reasonable minimum. When selected pupils are permitted to pass over a grade, the school should provide them with instruction in fundamentals such as multiplication and fractions missed by shortening their stay in elementary school. Failure to provide this instruction will place the child at a serious disadvantage in later grades. The teacher needs assistance, from curriculum experts and from parents of the children who pass over a grade, in determining what, and how much, individual instruction to give those children so as to blend successfully for them two grades into one. When this necessary individual instruction is given and skipping is limited to speedy learners who adjust well, socially, and to those who have acquired through extra preparation, much of the curriculum content of the particular grade to be "skipped," the child is not likely to be harmed by the shortening process.

0

n

e

n

d

n-

nld Fifty years ago the emphasis of the elementary school was placed on teaching the "three R's"; today the emphasis is on teaching the child. A formalism characterized the previous emphasis, a teaching of subject matter for the sake of teaching it. Today's emphasis is characterized by guided informality and by a desire to make school a happy and useful ex-

perience for the child, and one in which he or she presents ideas, and learns, on a small scale, to handle the responsibilities of a citizen in a democracy. This child-centered (or experience-centered), as contrasted to subject-centered, curriculum emphasis has been spreading from the elementary school to the high school, and stems largely from the thinking and writing of John Dewey.

At about the time the high-school curriculum was beginning to be enlarged, Dewey stressed the need for adjusting the elementary-school child to the environment of the modern world in which he or she lives. Dewey expressed these views in a small book entitled *The School and Society*, published in 1899, reprinted ten times, and then published in enlarged form in 1915. In this book, Dewey pointed out that the changes in civilized society caused by the industrial revolution have taken the child away from the contacts he otherwise would have with sources of his food, clothing, and similar material necessities and have denied many opportunities for natural activity, opportunities which were present a half century earlier when children were able to assist with in their homes and observe in their communities many production processes which have since passed from the kitchen, workshop, blacksmith shop, and the like to a factory.

Dewey contended that the school must give back to the child what has been taken away by this industrial trend and that the elementary school should not be conducted on a listening basis but ought to provide active participation for young minds and hands. He advocated a drastic reorganization of the curriculum, as well as of teaching methods. In the elementary school, he thought, the curriculum should be extended to practical fields, to include such matters as cooking and weaving so as to give to children an insight concerning the way people live, how the things we consume are produced, and how our present processes of production developed over the centuries.

In his 1899 book Dewey explained that the purpose of teaching cooking, weaving, and the like to children should not be so much the development of vocational skills as to acquaint the children with principles by leading the children to experiment and discover for themselves. In this way, he stated, children who are given flax, cotton, and wool and taught how to make cloth out of each by very simple means learn to recognize these three commodities in raw state and find how to prepare the fibers, spin, and weave, even though crudely. Geography and history, of course, tie in readily with this type of classroom activity. Young minds quickly begin to appreciate the value of cloth and inquire into current methods of manufacture, which is just what Dewey desired. He wanted to be certain that, in a rapid trend toward industrialization in America, with comparatively few children then remaining in school beyond the eighth grade, school should be made interesting and useful to boys and girls and provide them with "social power and insight" through the study of occupations.

It is altogether possible that the school garden as conducted by some elementary schools in large cities delighted John Dewey in his late years and fits into his 1899 curriculum ideas. The school garden provides activity that acquaints a city child annually from kindergarten to junior high school with natural activity which industrialization and urbanization has denied to many children. The school garden involves the planting of a cover crop to enrich the soil, the building of a compost pile in fall, and, in spring, the preparing of small plots of ground for planting radish and lettuce seeds and the seeds of flowers which bloom by the time school closes for summer vacation. The school garden provides activity and a great amount of learning by doing and also by observing and reading. This learning can deal with types of soil, methods of improving the soil and reasons why soil improvement is necessary, methods of preparing the soil for planting and time when this preparing should be done, planting and weeding, and how to study a seed catalogue and pamphlets on gardening. When each child carries home to his parents a few radishes, several lettuce leaves, and two or three beautiful flowers which he hepled to raise in the school garden, he brings with these garden products a sense of achievement.

Even though the main job of the elementary school is to teach children, attention needs to be given to subject matter in doing so. If children are isolated from subject matter, they will be isolated from many fundamental facts of life. Today's child will need skill in reading, in writing, and in arithmetic a few years hence, will need to know about his or her civic responsibilities, and will need to know quite a bit about science and geography. These needs indicate the reason why subject matter still is an important part of the elementary-school curriculum. The change of emphasis has been mainly a change of classroom atmosphere and methods of teaching rather than a drastic change in type of subject matter included in the curriculum. Multiplication, fractions, and spelling have not been tossed out of the curriculum.

Children are much more likely to think in terms of problems and projects than in terms of subjects. In elementary schools the meaningfulness of subject matter is increased for boys and girls when it is grouped logically instead of being scheduled in tight compartments—arithmetic at 9 o'clock, spelling at 10 o'clock, and geography at 11 o'clock, daily. Special projects of vital interest to children combine subjects in a logical way. Studying the home life of a Brazilian farm boy and girl as a project arouses the interest of members of a fifth-grade group, for they, too, like the Brazilian children, are boys and girls. In far away Brazil—in what kind of houses do the boys and girls live? Why do they wear those big hats? What do their clothes look like? What kind of food do they eat? The project is one which can easily arouse the interest of children. Pursuit of the project involves geography and improvement of reading, and also involves spelling, writing, oral presentation of ideas before the class, collection of Brazilian travel folders, and preparation of a factual and artistic scrapbook by each

member of the class, with each child specializing in a different phase of the subject and all exchanging the information which they have gathered.

Providing experiences in learning which have a significant meaning to the child rather than providing subjects as such, is the function of the experience-centered curriculum. It is dependent upon the "three R's" and other subject matter, but arranges subject matter around problems and projects. It places a premium on learning by doing. It does not organize subject matter only on subject lines. Instead, the project or problem used causes all subject matter, history, geography, arithmetic, and the like, related to it to be considered before the project is completed.

At the third grade, too, special projects will group subject matter logically, create much interest, and result in learning which provides a definite experience for the child. The following example by Ruth Frank is quoted from *The Sunday Star Pictorial Magazine*, Washington, D. C., for April 22, 1951, since it is an excellent illustration of the present emphasis in elementary education. It indicates the concept which Dewey had in mind and shows that the elementary curriculum fosters such things as skill in arithmetic and a spirit of investigation.

CLASSROOM GREENHOUSE

Down on the farm children don't need botany books to teach them how things grow. And in the third grade of Abingdon School, Arlington, Virginia, thirty-five city-bred boys and girls found the "Science Book on Indoor Plant Life" unnecessary, too. It was easier to learn about how things grow and more fun, too, if they did the growing themselves, instead of reading about it and figuring out diagrams.

The urge to find out how plants can grow indoors came about as the result of a book report which the class did on the subject. This smattering of knowledge led to so many questions that the teacher, Mrs. Gladys Cavell, suggested they find their own answers. The best way to do this, the 8-year-olds decided, was to build a greenhouse in the classroom. First came a field trip to a commercial greenhouse, then a visit to the Agricultural Center at Beltsville, Maryland, where special guides showed and explained what was making the plants grow and what made some of them die.

Abingdon being short on carpentry supplies, the youngsters raided their homes for everything from tape measures to saws and paint brushes. One boy even sent his mother to school after he had fallen off his bike and gotten four stitches in his head. Gee, mom, I promised I'd bring the nails and they gotta have them for the greenhouse," he insisted, "So you have to go and take them instead of me!"

Mothers were recruited to round up orange crates, but the children soon learned that lemon crates were sturdier and a new hunt began. For their own architectural reasons, they decided on a slanted roof, the designing of which created a real furor. A father contributed reams of cellophane, which simulates the glass roof and sides of a real greenhouse. Everybody took turns in the construction work and pandemonium was kept at a minimum.

Mrs. Cavell decided that each child would drive two nails, then pass the hammer to the left. She discovered, however, that only one of the youngsters was strong enough to manage the very big nails. The children connected strips of cellophane by means of a hot iron, learned how to put cellulose tape under all nails at points of stress and how to thin old paint so that it would spread.

The greenhouse completed, planting began. Copying on a limited scale the soil controls they had seen at Beltsville, the youngsters planted in wet soil and dry, as well as in water. They tried sweet potatoes and white, onions, corn, peas, beans, peanuts—anything their mothers had around the house that the pupils wanted to "see" growing. Excitement reached such a pitch that a mother from another class joined the fun and sent in a batch of red pepper seeds.

Accurate charts were kept on all botanical specimens. Greatest amazement was created by the corn seed chart, which at last reading was about to outgrow the paper it was written on. In two weeks, the corn grew over ten inches and each morning the measuring stick was the first item the children went for, to see how much progress had been made overnight.

As a child-made phenomenon, the greenhouse-in-a-classroom has been a sightseeing "must" for grownups from miles around. Mrs. Cavell thinks it has been a triumph in education because, without the kids realizing it, they learned spelling, composition, arithmetic, statistics, geography, carpentry, and the human values of sharing and accomplishing.

A publication of the United States Office of Education, Bulletin 1949, No. 12, entitled *The Place of Subjects in the Curriculum*, describes one day in the fourth grade of a school using the experience-centered curriculum. The Bulletin shows that the atmosphere of the classroom was informal. Both freedom and a business-like attitude prevailed. The girls and boys were busy with many activities. Each child knew what he was to do during each part of the day. During parts of the day they formed their chairs into a semicircle and met in a single group for instructions and discussion. They also separated into work groups known as committees.

The children had already learned how to find facts in encylopedias and in other books, how to draw maps, and how to plan a simple exhibit. The teacher answered some of their questions by using the blackboard, and she moved among the work groups, giving attention to individuals where it was needed.

The teacher capitalized on spontaneous remarks made by the children. A conversation at the beginning of the school day, when the class was meeting as a single group, concerning types of wood and about forests aroused an interest in lumbering. Quite a few of the children decided they wanted to study about forests. A discussion of wood and forests and a quiz on the subject, prepared by three of the children, followed. Before the end of the day the boys and girls learned something about lumber, about the geography and history of logging, and about the arithmetic of measuring board feet. It was just the beginning of a project.

Games were played in the gymnasium by both the boys and the girls for a short time in the morning. In the afternoon there was a quiet period for reading during which time the children became absorbed in their library books, since there was a large and carefully selected collection available from which to choose.

During a fifty-minute period in the afternoon, the physical education teacher instructed the boys in stunts and pyramids for a Father-Son Play Night, and the girls remained in the classroom to listen to phonograph recordings and to read poetry. The recordings were played in order to stimulate interest in reading. After the girls had listened to the recordings, the teacher read poetry to the girls, and at times the teacher and the girls read aloud, together. One girl asked to read one of her favorite poems to the group. After the boys returned to the room, the class discussed the contents of the latest issue of their school newspaper, pointing out how articles could have been improved and talking about news for the next issue.

Near the end of the busy day the teacher and the children planned a schedule for the activities of the next day. With a bit of guidance from the teacher, five proposals were agreed upon. The class was assured by the teacher that the five would be followed.

Co-operative planning of the school day by pupils and teachers is an important feature of the experience-centered curriculum. Pupils do have good ideas, but it is the teacher's responsibility to see that within the limits of the semester all subject areas of learning included in the curriculum for the semester are covered and in a way which does not destroy unity of learning. There need not be a definite amount of subject matter included in each day's activities. More will be included on some days than on others. Some subjects will be used on one day, and others on the next. Within a semester, however, a prescribed amount of subject matter must be covered. Any school which pays no attention to its curriculum is like a railroad which disregards completely its timetable for arrival and departure of passenger trains. Experience-centered curriculums, like those which are subject-centered, require that children in any particular grade be taught certain subject matter fundamentals. Otherwise some children might reach junior high school without a knowledge of simple fractions, and others with a shockingly inadequate ability to spell common words.

The committee work, the planning of the school day, and the discussion of why certain historical facts are interesting and important, how the school newspaper can be improved, and so on, are typical of the experience-centered curriculum. These activities are not artificial to the child. They constitute an experience which he or she can feel and understand. These activities teach children at a highly formative period of their lives to discover facts, produce ideas, and share both.

A certain amount of intellectual discipline bordering on drill (constructive repetition) is necessary in the elementary school in order to build a strong foundation for learning. Quintilian of Rome recommended that boys be taught to summarize, orally and in writing, Aesop's Fables and the work of poets. Quintilian wrote as follows in Chapter IX of Book I of his Institutes of Oratory:

2. Let boys learn, then, to relate orally the fables of Aesop, which follow next after the nurse's stories, in plain language, not rising at all above mediocrity, and, afterwards to express the same simplicity in writing. Let them learn, too, to take to pieces the verses of the poets, and then to express them in different words; and afterwards to represent them, somewhat boldly, in a paraphrase, in which it is allowable to abbreviate or embellish certain parts, provided that the sense of the poet be preserved. 3. He who shall successfully perform this exercise, which is difficult even for accomplished professors [teachers], will be able to learn anything. (Taken from the translation by John Selby Watson, published in London in 1903).

A curriculum emphasis along the line recommended above by Quintilian can be entirely in harmony with modern trends in the elementary curriculum. Without sacrificing any of the most successful modern methods of teaching in the elementary school, the idea here expressed by Quintilian can be put into practice, and to great advantage, in the sixth grade. Each child in the room can be permitted to choose a fable rather than be assigned one. Instead of a fable being read aloud by one child while the others follow in their books (or let their minds wander), each child can tell and explain the fable of his or her selection and then all can discuss it. Through this oral summarizing and discussing, wits can be sharpened for all. Reading of a type which can easily become meaningless to the reader and monotonous to the listener would largely be eliminated. By written summarization, further practice in careful reading and much practice in writing is obtained.

Quintilian's recommendation may seem like a simple exercise. Actually it presents a real challenge and involves cultivation of the ability to read, to think, and to express oneself orally before others, and in writing. By having children discuss each other's presentations, an ability to make immediate analysis is also fostered.

If handled well by the teachers, Quintilian's curriculum idea can be exceedingly constructive. It can help markedly in building a strong foundation for learning. His idea can be applied to reading material other than Aesop's Fables; however these are well adapted for the use of sixth-grade children. Furthermore, these fables are worth perusal and reflection on the part of adults, as they contain many gems of philosophy. They are far more than mere tales of fantasy.

On the elementary level the curriculum should be mainly an experiencecentered matter—a curriculum which lends itself to a classroom greenhouse to learn how plants grow, and to other projects which involve much useful learning in a concrete and interesting way. Unfortunately, in many elementary schools in America the curriculum is not of this type. Numerous teachers who have been employed on an emergency basis during the last dozen years and many who have been teaching for fifteen or more years have not learned about, or have learned about but not accepted, the experience-centered approach, or have not mastered the special combination of teaching techniques which the experience-centered curriculum requires.

In the hands of a capable teacher who believes in it, a curriculum with a child "experience" approach is excellent. Development of good reading habits will then not be neglected. Attention will be given to careful choice and spelling of words when writing. Accuracy in computations will be stressed. Those children who need it most will be given ample opportunity to develop the ability to express themselves before the class in a concise, accurate, and effective manner. The child "experience" approach is the one upon which is based "progressive education" of the superior kind, found in both the elementary school and the high school at Winnetka, Illinois.

Those interested in the curriculum of elementary schools and the problems of building a strong foundation for learning will find three books particularly useful. One is entitled Education for All American Children. It was published in 1948 by the Educational Policies Commission of the National Education Association of the United States and the American Association of School Administrators. Chapter 3, pages 99-156, deals with the curriculum for elementary schools. A book entitled Developing a Curriculum for Modern Living, copyrighted in 1947 and going through a second printing in 1948, was published by Teachers College, Columbia University. The three principal authors were Florence B. Stratemeyer, Hamden L. Forkner, and Margaret G. McKim. The book gives many ideas as to how a curriculum with a child "experience" approach can be developed for the elementary school and continued in the high school.

Parents as well as teachers can do much to inculcate in children a desire to read and to turn the child's attention to items which help build a strong foundation for learning. The best book of its kind, to assist parents and teachers in developing the curriculum objective of good reading habits at an early age, is entitled *Children and Books*. Written by May Hill Arbuthnot and published by Scott, Foresman and Company in 1947, this large volume contains numerous suggestions concerning the reading interests of children. It cites and summarizes briefly many books suitable for children and reprints in short form hundreds of choice ballads, fables, stories, and the like, together with information which is useful in explaining to a child the various items which are read to him from this book or drawn to his attention.

THE HIGH-SCHOOL CURRICULUM

What should youth be taught? This is a fundamental question which has plagued educators for centuries. Conflicting philosophies and interests, together with inertia and lack of sufficient thought have caused the secondary curriculum, perhaps more than any other curriculum, to be a matter of compromise.

Even though a great variety of courses have been added to the highschool curriculum during the last fifty years, the high-school curriculum, basically, has not changed much in the twentieth century. Conditions have changed rapidly, especially in the last thirty years, but the highschool curriculum has not kept abreast with the times.

According to the United States Office of Education, during the school year 1953-54 there were an estimated 6,275,000 youth in public secondary schools (grades 9, 10, 11, and 12), and an estimated 655,816 in non-public secondary schools in 1951-52, the latest year for which such data are available. The curriculum for such a large segment of America's population deserves the most careful attention, now and continuously in the future. The high-school curriculum has an opportunity to shape American life. It holds a strategic and tremendous position.

Many attacks have been made on the high-school curriculum during the last fifteen years. Much has been published concerning the way in which it should be revised. J. Paul Leonard, President of San Francisco State College, makes the following statement in the preface to the original edition of his book entitled *Developing the Secondary School Curriculum*, Rinehart & Company, Inc., 1946 (revised 1953):

The secondary school can no longer delay facing the fact that it must bring its curriculum and organization into harmony with its changed student population and functions. Until recently its curricula have been dictated almost entirely by college entrance requirements, but an unparalleled increase in population has forced the secondary school to change its major purposes from college entrance to the development of competence in citizenship for all youth. The American high school today, with no counterpart throughout the world, is the one place where youth of all races and from all social and economic classes are learning to live together in a democracy.

It is obvious that the same curricula are not suited to all youth now in the secondary school and that the academic subjects appropriate to the selected group of youth attending high school in the nineteenth century are inadequate educational materials for the mass of youth in the modern secondary school. To be sure, changes have been made in the high-school curriculum, but these changes have been primarily in the nature of additions to the basic academic subjects. Only in the last twenty years have any genuine attempts been made to reorganize the basic requirements of the secondary school curriculum. The movement to bring unity among the various subjects, so common in the elementary school today, has only slightly affected the secondary school. If the secondary school is to discharge its function to society, greater unity among the various subjects must be secured and a new orientation approximating modern social and political conditions must replace the emphasis formerly thrown upon the few major subject disciplines.

In the preface of the 1953 edition, Leonard speaks about the inadequacy of the secondary school. He states "there has been a growing concern about school failures, individual eliminations, and personal maladjustment; and criticisms have been leveled at the standard curriculum. While much work has been done on the secondary-school curriculum by national and local committees and by local teachers, an examination of the field

reveals two major deficiencies. (1) There has been very little creative thinking about fundamental change in the curriculum of the secondary school. The dead hand of tradition still guides the selection of the courses. By and large, the heart of the secondary curriculum (content and methods) is essentially the same today as it was forty years ago. (2) What changes have been made in the elementary schools, due to studies of growth and development and to a resulting philosophy of learning and experience, have barely influenced the secondary teacher, her principal, or her courses.

"There are, therefore, vast unexplored fields of knowledge regarding the program of education which could, with proper methods, produce the kinds of citizens democracy needs."

Harold Alberty, Professor of Education at Ohio State University, wrote a book entitled Reorganizing the High-School Curriculum. A revision of this book was published by the MacMillan Company in 1953. On pages 6-9 of the revision, Alberty shows that the high-school curriculum has not kept pace "with the new demands made on it by the changing socioeconomic scene and the new concept of adolescent needs."

Thomas H. Briggs, formerly Professor of Education, Teachers College, Columbia University, too, commented pointedly on the high-school curriculum. In an article entitled "Proposals for a Curriculum Commission," which appeared in the May 1945 issue of *The Bulletin of the National Association of Secondary-School Principals*, he stated:

Sharply criticized for years and largely condemned by many authorities, the traditional curriculum still funrishes the core of the educational program of the large majority of high schools in the country. It is strongly supported by tradition—in the public as well as in the profession. It constitutes a vested interest of teachers, who are skilled in narrow subject matter fields, and it is placidly accepted by millions who have never thought their way through to a basic social and educational philosophy, and who have never glimpsed that bright vision of what education can pragmatically contribute to modern civilization.

The criticism has accumulated from the days of Benjamin Franklin. It has been increasing both in amount and in acuity during the past decades and can no longer be ignored. Sooner or later it will break tradition and, unless a sound substitute is ready, it will sweep away much of the good along with the relatively valueless. The old curriculum has had tremendous support from two classes of the public, those who are proud to have survived the rigors of the prescribed regimen, and those who are too humbled by their failure to offer spoken criticism.

As early as 1933 Briggs had made suggestions as to how the high-school curriculum could be improved. In the May 1945 article referred to above he maintained that the high-school curriculum is outworn and that a staff of the "ablest professional men and women" in the United States should work together continuously on a full-time basis as a curriculum commission, to produce desired curriculum reform. He urged that the commission

n

e

tı

ti

should have unhurried advice "from the best philosophers, psychologists, sociologists, economists, statesmen, and representatives of the lay public."

The April 1950 issue of *The Bulletin of the National Association of Secondary-School Principals*, includes an article by Briggs entitled "The Administrator's Role in Secondary Education." In that article he makes the following statement:

The curriculum, to repeat, is the basic problem in education, and the problem is peculiarly acute in high schools. This has long been recognized by educators, who have been more critical of current practices than any layman. Their criticisms are valid, based on accumulated evidence of failure of the traditional. Although the conventional curriculum is a vast improvement over what was offered a generation ago, it is demonstrably failing to do anywhere near what it should and can do to prepare youth for modern living.

Two types of secondary schools are found in the United States today, the public and the private high school. The public high school offers a college preparatory and a vocational curriculum. The private high school has a curriculum pointed mostly toward preparation for college.

In many public education systems in the United States one finds a separate unit, the junior high school, wedged between the elementary school and the high school. The junior high school began as an experiment about 1907 and now is found in many cities of the United States. The junior high school co-ordinates the curriculum for the seventh, eighth, and ninth grades, and during its first two years offers a wider range of subject matter and opportunities for learning than is the usual case in the elementary school which has eight grades. Furthermore, the junior high school assumes a larger responsibility for children during these three years than do the elementary and high school in the system where eight grades completed in one building are followed by four years of high-school work. At the same time the junior high-school arrangement offers children an opportunity to accept much more responsibility in the seventh grade than does the eight-year elementary school. By means of the junior high school the transition from the elementary grades to the somewhat adult atmosphere and requirements of the high school is made more gradual than under the "eight-four" plan.

Over the years the classical curriculum has been prominent. When considering the high-school curriculum, the classical curriculum, now usually known as the academic curriculum, is much referred to and much denounced. Classical curriculum is a rather vague term. It has meant different things in different centuries, in both America and Europe. The classical curriculum is one which includes the study of Latin language and literature, or Greek and Latin language and literature. The hazy term "traditional curriculum" is often used to describe the academic, cultural type of offerings, as contrasted with a curriculum built around commercial or shop skills. Secondary schools which emphasize the study of Latin, or Latin and

Greek, and other "traditional" subjects are known as classical schools, but are now rare in the United States.

At the secondary level the classical curriculum for several centuries has been a college preparatory curriculum. The classical curriculum during the last 100 years has included science, mathematics and modern languages—and during the last fifty years, the social studies—as well as Latin. The classical curriculum never has emphasized vocational subjects of the type which are found now in a vocational high school. For instance, today one would not expect to find typewriting or carpentry in the classical (academic) curriculum in an American high school.

There is a danger in departing entirely from the classical type curriculum, either at high-school or college level, for it includes fundamentals. If social studies (social sciences at college level), mathematics, the natural sciences, English, and foreign languages are sacrificed for different types of general courses of a kind which contain few fundamentals, and for vocational courses, what will the student be given which will help him develop an inquiring mind, an appreciation for problems of other people (inhabitants of the United States and of other countries), and what broad concepts will he be given which will help him meet life's problems with intelligence and courage?

The Harvard Report (General Education in a Free Society, Harvard University Press, 1946) is a remarkable study by a committee of Harvard faculty members. Chapter 4 of the report stresses the need for general education in the high-school curriculum. It recommends that general education at the secondary level include such substantial areas as the humanities, the social studies, science, mathematics, and "education and the human being" by which the committee meant teaching the student to reason.

In order to construct a base for a high-school curriculum, it is necessary to study the adolescent and the nature of the world in which the high-school boy and girl live. Such study will include specific elements, as for example current job opportunities, and existing job requirements, in addition to problems of human relations and citizenship.

A very challenging but over-simplified 16-page brochure entitled *High School, What's in It for Me?* was published by the American Technical Society, Chicago, Illinois, in November 1948. In an arresting picture, chart, and text form, the brochure shows that American high schools do not "make sense" for sixty per cent of America's children and youth. It points out that twenty per cent go to college, twenty per cent to skilled occupations, and sixty per cent to jobs which require little training. The sixty per cent become sales girls, office boys, elevator operators, cashiers, filling station attendants, stockroom attendants, street car conductors, file clerks, assembly line workers, mechanics' helpers, and receptionists, and states that they need and want "an invigorated general education" relating

to everyday matters. The brochure maintains that the youth who will go to college or to skilled trades, too, want invigorated general education. It declares the curriculum to be unsatisfactory. This is shown by the fact that approximately half of all children drop out of school without completing the twelfth grade and graduating. The great majority of the dropouts are caused by boredom and frustration stemming from the curriculum.

The brochure contends that above all else, if the school is to be able to hold youth, it must offer a curriculum which makes sense to youth. The brochure proposes that high-school students be taught education for family life, consumer education, citizenship, good work habits, and creative use of leisure time.

In citing examples as to how these types of instruction can be handled, the brochure refers to the high school of Sedan, Kansas, which gives credit for work experience. Typing and shorthand students address envelopes and take care of all mail for welfare organizations, whereas community dinners for farm groups are cooked by the homemaking classes. Boys studying vocational agriculture assist farmers.

But in stressing these real life experiences, it must not be forgotten that on the high-school level there should probably also be a broad curriculum of fundamentals—mathematics, science, English, several modern languages, and social studies. The exactness and reasoning involved in mathematics has the possibility of teaching preciseness, developing appreciation for logical orderliness, and producing the ability to find one's way through abstractions. Furthermore, a knowledge of mathematics is required in many fields of work. Science, like mathematics, sets an example of exactness. It also explains natural phenomena and encourages a spirit of investigation.

English and foreign languages acquaint students with great literature that can shape their concepts of life. A study of literature gives one access to the best authors, and to descriptions of the potentialities to which human beings can rise. When students read the originals of comparatively few literary masterpieces, they have time to gain an understanding of what they read and to improve their own capacity to think and to express their ideas. The study of a foreign language helps an American boy or girl to understand English. Translating into English is good practice in reading and writing the language of Americans. Translating can improve clarity of expression and increase one's understanding of and appreciation for people of other countries.

The social studies can be used to teach young citizens to analyze public problems objectively, to recognize changes that ought to be made, and to appreciate gains which have been achieved.

The high-school years constitute an exploratory period. If a high-school student finds mathematics difficult and distasteful under more than one teacher, science excessively onerous under two teachers, and history relatively easy and interesting under more than one teacher, it can reasonably be assumed that he may be fitted better for the humanities or social sciences than for the exact sciences or even a mechanical trade. The important matter is to be certain that each high-school boy and girl has the opportunity to use high school as an exploratory experience to find the broad field in which he or she is likely to do best and be happiest, whether or not contemplating college entrance. This means there should be some required courses both in the humanities and in the social studies on the one hand, and in mathematics and in the natural sciences on the other, so that students will be exposed to both of these large areas of knowledge. When this is the case, students and their teachers can begin to make evaluations as to which of the two large areas each student should point toward by time of leaving high school.

An individual may forget what he (or she) has learned about chemistry, biology, or physics after leaving high school and may never have occasion to use what he learned in these subjects. If, however, he adds habits of observation, experimentation, and careful analysis to his life generally as a result of the instruction in these subjects, the instruction will have been worth while. If he becomes a machinist or a mechanical engineer, the time spent studying literature and languages, fine arts, civics, history, and problems of democracy will have been well spent if it produces a sense of social responsibility and a desire to understand human problems. The mere knowledge as to what these subjects are like is something which makes his general grasp of the world a bit more firm than it otherwise would be. Even if he never reads Shakespeare again, he knows who Shakespeare was and, if he does not pursue chemistry beyond high school, he knows the use to which Bunsen burners are put.

To a broad curriculum of fundamentals there should be added a considerable variety of courses and other means of instructional activity, so there will be a minimum of forcing subjects on boys and girls. Almost everywhere that one looks there are people who detest algebra, or European history, or French, or other subjects because of having been forced to take them in high school. As much as consistent with the principle of requiring students to use high school as an exploratory period through sampling fundamental subjects, they should be given opportunity to select their own courses and other means of instructional activity. The industrial arts should be available on an exploratory basis for those students who shy away from college preparatory work.

If a student does poorly in two courses in the same subject, one under each of two different teachers, and wants no more of that subject, he should not be required to take additional courses in it. Some way for him to be graduated from high school without taking more courses in the subject should be provided. However, when so-called practical subjects which are actually training, or very close to it, rather than education, crowd out subjects such as mathematics, English, and history, they crowd out those which definitely are practical. Fundamentals—general education of a substantial type—are provided so as to fit the high-school student to meet life problems. Youth possessing and using fundamentals can acquire technical training after graduation from high school. Youth who do not acquire the fundamentals in high school and do not proceed to college are likely to go through life without the fundamentals.

An individual lacking throughout life the fundamentals which can be secured in high school is fairly certain to be somewhat like a big boat with a small rudder. He will probably be able to hold his course in smooth water, but in heavy seas only, if at all, with extreme difficulty. Even with an ill-suited secondary curriculum, some youth leaving school at the end of the twelfth grade will do all right during the remainder of their lives, because of native ability or home training or both. Unfortunately, many youth will not have these assets to fall back on.

There is room for both the vocational type of subject and general education subjects, especially if instruction would be extended into the summer months. Each of these two types is needed in the high-school curriculum. Vocational courses can serve as an exploratory period and help the student find his or her vocational field and to prepare for it.

Education Unlimited, a Community High School in Action is the title of Bulletin 1951, No. 5, published by the U. S. Office of Education. That pamphlet describes curriculum revision in East Hampton, Connecticut, an industrial town of 4,000 population. Written by Grace S. Wright, Walter H. Gaumnitz, and Everett A. McDonald, Jr., the pamphlet indicates how a small community with a typical secondary curriculum, pointed toward college entrance, can be revamped so as to serve adequately nearly all of its students rather than just a minority of them. In addition to many changes at East Hampton a plan which called for the use of correspondence courses was adopted as a means of expanding the curriculum. The Office of Education publication states when students ask for courses which the East Hampton faculty cannot teach adequately, or when too few students ask for a course to justify forming a class, correspondence courses are used. By means of correspondence study, East Hampton students have pursued subjects such as radio, advanced auto mechanics, driver training, animal husbandry, advanced chemistry, advanced biology, commercial law, etiquette, agriculture, third- and fourth-year Latin, Greek, Italian, Spanish, German, anatomy, meteorology, differential calculus, meat cutting, and music.

The experience-centered curriculum fits logically into the elementary school. Since 1940 much attention has been called to its somewhat infrequent use in the high school, and to the use of a new concept of the core curriculum in the high school. A part of the distinction between the subject-centered and the experience-centered curriculum, particularly at

the high-school level as contrasted with the elementary school, is a matter of straining at words. In the curriculum area quite a few overlapping terms have emerged, such as activities curriculum, broad-fields curriculum, child-centered curriculum, correlated curriculum, experience-centered curriculum, fused curriculum, integrated curriculum, pupil-teacher planned curriculum, and unified curriculum. The technical jargon used by educators is extensive. To some degree this is necessary, for education deals with the use of a large variety of teaching aids, with many types of complex tests, and with people ranging from infancy to senility, from dullness to brilliance, and from excellent physical and mental health to serious physical and mental deterioration. Nevertheless, it seems that technical language is used to a greater extent than necessary to describe ways of improving one's education and ways of measuring the improvement. As a matter of fact, a majority of successful teachers, especially in elementary and high school, naturally do use techniques designed to assist the learner to understand by "experience," rather than parcel out subject matter as one would issue automobile license tags.

At the high-school level perhaps too much is claimed for the so-called experience-centered curriculum. The good teacher, from Socrates to the present, has used initiative and judgment in bringing experience to the learner, and many teachers have eliminated rigid formalism in their classrooms. The emphasis on the experience-centered and on the core curriculum is an outgrowth of ideas set forth by educational reformers for many years. To put it extremely, the subject-centered curriculum is one under which the teacher pushes the nose of the learner between the covers of a textbook so as to drive dates of history and scientific principles into his head; the experience-centered curriculum is one which calls for an activity school, where class activity is determined largely by the interests of class members, with no one knowing what will be experienced, or learned by the end of the semester. Fortunately, most instruction under either the subject-centered or the experience-centered curriculum turns out far better than this illustration might lead one to believe.

Under former concepts, what was to be taught was clearly and briefly set forth. Whether or not a teacher was following the curriculum was easily determined. The teacher's creative teaching, or lack of it, was readily discernible. In the use of the experience-centered curriculum, it is sometimes extremely difficult to draw a line between curriculum requirements and teacher performance, as neither are focused sharply and both are interwoven. This has the advantage of permitting latitude in the classroom, but also produces the disadvantage that instruction may go far afield and in doing so may miss completely some essentials included in the currently approved curriculum. An experience-centered curriculum needs to be organized to some extent in order to be successful. It cannot just follow from one spontaneous thought to another and zigzag through the entire

realm of knowledge and still be effective. Organized thinking and arrangement is one of the objectives for which education should strive. Attaining this objective causes an individuol to be distinctly different from the untrained mind of the primitive human being.

To say that either the subject-centered curriculum or the experiencecentered is without value in the American high school is ridiculous. The value of either depends in almost every instance on the ability, sincerity, and enthusiasm of the teacher. The best curriculum is of little use unless put into operation by an appropriate staff, which has at its disposal reasonably adequate space and equipment.

It is good to have continuous waves of new ideas in the field of education. Yet there is a very real danger that when these ideas are proved to be practical, they will be introduced into a school system before the system has teachers who are capable of handling them. New ideas in education which have proved their usefulness should not be frowned upon. Nevertheless, it should be expected that they not be installed in a school until a competent staff is available to handle the particular approach, and until the community which is appropriating money to pay the cost of operating the school receives an explanation of the idea and understands its general nature.

Among special studies concerning the high-school curriculum, in addition to those mentioned above, one by the National Association of Secondary-School Principals, another by the American Council on Education, and a third by Bent and Kronenberg, are particularly useful. The first of these special studies is a pamphlet entitled Planning for American Youth, An Educational Program for Youth of Secondary-School Age. It was published by the National Association of Secondary-School Principals in 1944 as a summary of an NEA book entitled Education for All American Youth. The 1944 pamphlet, as revised in 1951, consists of 64 pages of pictures, charts, searching questions, and direct statements dealing with the differences in high-school pupils, the wide range of social problems which complicate curriculum planning, differences in schools and the like; an ideal curriculum for a rural high school and another for a city high school are outlined in detail, as though actually existing.

In 1940 the American Council on Education published a 36-page pamphlet entitled What the High Schools Ought To Teach. This pamphlet was the report of a special committee on the secondary-school curriculum. It made some definite recommendations.

The third edition of a book by Rudyard K. Bent and Henry H. Kronenberg contains eight chapters devoted to the high-school curriculum (chapters 8-15, pages 183-438). The book is entitled *Principles of Secondary Education* and was published in 1955 (3rd edition) by McGraw-Hill Book Company, Inc.

THE CORE CURRICULUM

Among various features introduced during the last twenty years to reduce rigidity of the curriculum in public schools in the United States is one known as the core curriculum. Developed in different ways, the core curriculum is actually just one of a number of courses in which a student is enrolled. It is a special type of course-offering in the area of general education, and is found in the junior and senior high school. It is a consolidated course which combines subject matter and activities from two or more fields, such as English and history.

The core curriculum is only part of the total curriculum in the schools where it is found. It is the part which attempts to aid all students to meet those needs which are most common in current life, regardless of subject matter field in which those needs may fall. The core curriculum aims to provide instruction, in minimum form, in the fundamentals of living so as to supply students before they leave school (or before specializing) with a broad vista of life's problems. The core curriculum aims to produce personal and social responsibility and competence in high-school students.

In some schools the core curriculum is developed fairly extensively on a student-experience basis as a means of orienting youth to life. In such instances there is much teacher-student planning. There are field trips, special reading assignments concerning a social problem upon which the class is focusing its attention, and a considerable amount of discussion and problem-solving by the group. Emphasis is placed on study and discussion of such matters as health, safety, manners, thrift, vocations, knowing my community, living with my family, and conserving our natural resources. In such instances the core curriculum is a specialized form and an excellent example of the experience-centered curriculum.

In some schools claiming use of the core curriculum this specialized course offering is little more than a merging of content from two subject matter fields. In these cases the core curriculum may consist of a mere fusion of a course in English with a course in world history. The combined course, even though hailed as something new, may fail to develop in the high-school student an understanding of his or her immediate social problems in modern society and those social problems which will be met during the adult years.

When subjects and activities are combined into a core curriculum, there is adequate justification for giving more time to the "core" than to a single subject. This additional amount of time enables a skillful teacher to learn much about the class members, to plan work units which meet the needs of the students enrolled, and to provide thorough individual and group guidance. The use of a core curriculum permits a teacher quite a bit of latitude in dealing with subject matter so as to fit it to the needs and problems of high-school students. A compartmentalized curriculum in junior high school or in senior high school can be modified so as to assist youth in ad-

justing to life. This adjustment includes the developing of understandings and attitudes which all citizens should have, whether they are elevator operators or college professors or find themselves in other occupations after leaving school. The core curriculum also enables a school administrator to set aside time during the school day for class members to study their personal problems within appropriate limits, so as to be able to meet present and future requirements of citizenship.

The use of the "core" places a premium on a teacher' initiative in developing new ideas and procedures, in drawing students out, and in guiding their interests. The core curriculum provides a very good opportunity to use the experience-centered approach in the junior and senior high-school grades witout destroying the possibility of schooling students in subject matter fundamentals falling outside of this special course offering. For example, the student enrolled in a core course can also be enrolled in geometry.

Much has been said and published about the core curriculum during the last ten years. B. Othanel Smith, William O. Stanley, and J. Harlan Shores in their Fundamentals of Curriculum Development, published by World Book Company in 1950, devote two lengthy chapters to it. A stimulating book by Roland C. Faunce and Nelson L. Bossing entitled Developing the Core Curriculum describes in detail the ideal type of core curriculum and indicates specifically how it can be put into operation. That book, published by Prentice-Hall, Inc., in 1951, recognizes the difficulty of establishing a series of ideal core courses in a school system. A book by Dorothy Mudd, published in 1949 and entitled A Core Program Grows, is devoted to a description of the core curriculum in the junior high schools of Harford County, Maryland. Nevertheless, a study by the United States Office of Education as reported in Bulletin 1950, No. 5, Federal Security Agency, Office of Education, 1950 shows that the core curriculum is a rather vague thing and that it is not used extensively. In the report, entitled Core Curriculum in Public High Schools, An Inquiry into Practices, 1949, Grace S. Wright indicates that the core curriculum is used in an estimated 3.5 per cent of all public secondary schools in the United States, and mainly in one or two cities in each of a small number of states. The report is based on a circularization of 13,816 of America's public high schools in the spring of 1949. Of these, 545 reported core curriculums. Sixty-two per cent of the 545 schools using the core curriculum were located in seven states-California, Maryland, Michigan, Minnesota, Missouri, New York, and Pennsylvania. In but one of these states, Maryland, was the core curriculum found to be in rather wide use.

The 545 schools reported 1,119 different core courses. Seventy-two and seven-tenths per cent of the 1,119 cores were made up of a combination of English and social studies. In 19.2 per cent, English and social studies were combined with one or more other subjects, mainly science, mathe-

matics and health. Course names frequently given to these offerings, the bulletin informs us, were as follows: "Social Living," "Basic Living," and

"Problems of Living."

The Office of Education found that the core curriculum is used mostly in the junior high school grades. In 67.8 per cent of the core courses reported in the class met ten times per week. Approximately three fourths of the 1,119 core courses enrolled every student in the grades to which core courses were made available, which indicates that the core curriculum is usually a required course in those schools where it is used.

The core curriculum continues to present problems to the teacher and to the school administrator. In an article entitled "Core Curriculum: Why and What?" appearing in the February 1952 issue of School Life, Grace S. Wright shows that the core concept, judging by core courses and core programs, is still rather nebulous in many instances. She begins the article by stating, "Like many terms used in education, 'core curriculum' has no precise definition." In the article, Miss Wright points to the need for in-service training of the teachers who are to handle core courses. She recommends that a principal should gain the consent of his entire staff and the active interest of no less than two of his teachers and should do a public relations job in the community before starting a full-fledged core course, so as to avoid major pitfalls.

Another study by Miss Wright is entitled Core Curriculum Development, Problems and Practices. It was issued by the Office of Education in 1952 as Bulletin 1952, No. 5, Federal Security Agency. In that bulletin Miss Wright shows that the core curriculum continues to be somewhat nebulous rather than well defined, and that it is gaining ground in some cities and losing in others. More than half of the 104 pages in that bulletin are devoted to major problems affecting a core program, and ways to at-

tack those problems.

An article entitled "A Study of Core Curricula in Kansas," was published in the November 1951 issue of the *University of Kansas Bulletin of Education*. The article describes core programs in junior high schools of Atchison, Chanute, and Wichita. Three seminar teams from the University of Kansas visited these core programs. The teams found that the content of the core in these junior high schools embraced only two or three subject matter fields and fell short of including "the learning experiences judged to be the common need of all pupils." The article reports that at Chanute Junior High School the "Social Living" core, which had already been in operation for thirteen years, was built around the following topics:

Seventh Grade: Understandig Our Need for General Skills; The Citizen and His Community: The Citizen and His State; How a Knowledge of the Past Helps Us To Understand and Appreciate the Present.

Eighth Grade: Understanding Our People; Understanding the Growth and Development of the Democratic Ideal; Understanding the Development and Growth of Our Nation in Size and Power; Knowing About Our Resources and the Growth of Our Country as

an Industrial Nation; The United States Becomes a World Power; Appreciating Our Cultural Growth.

Ninth Grade: Reorientation in Skills and Study Habits; Understanding Our Personal Needs; Understanding Our Government; Careers.

The Chanute core courses were based on a combining of material from

three subject matter fields-English, history, and geography.

A six weeks unit in a seventh-grade core is described fascinatingly in Chapter IV, Creating a Good Environment for Learning. That volume was published by the Association for Supervision and Curriculum Development as its 1954 Yearbook. The scene of the chapter is a cosmopolitan community of approximately 5,000 inhabitants on the eastern seaboard. A core program was started in 1946 for its junior high-school students. The principal understood the purposes of this core program and assisted in its development. The teachers were given special training and were encouraged to use imagination in conducting the core program. The learning units were planned by faculty and pupils and were drawn from resource units which had been developed by the teachers in county-wide training for core teachers. The problem areas studied by these seventh-grade pupils were entitled "Exploring Our Educational Opportunities," "Achieving Good Intercultural and/or International Relations," and Maintaining Body Efficiency."

In the relatively few places in the United States where the full-fledged core course is found, it is youth-centered rather than subject-centered, although it does make use of subject matter. Ideally, it makes use of many kinds of reference material, as for instance a file of clippings. The course does not revolve around a textbook. The group may be divided into committees with each committee preparing and staging demonstrations for the entire group. Community leaders, such as the city health officer, may be brought to the school or the group may be taken to the community leaders for special demonstrations. Through participation, rather than simply by listening, the class members in a core course learn about matters

with which all youth should be familiar.

It is the view of the present writer that the core curriculum should be developed in junior and in senior high schools to the extent necessary to produce a sense of social responsibility in young Americans and a knowledge as to how to put that consciousness into useful operation. In order to make the core curriculum function appropriately it is almost imperative that a teacher, no matter how well selected for the assignment, be supplied with specially prepared printed materials to place in the hands of each student. Much yet needs to be done in the way of preparing for boys and girls suitable reading materials relating to social problems. The materials should be impartial and still have life. They should be illustrated with pictures and factual cases. The preparation of such materials requires courage, discernment, and skill. Core curriculums, and the teachers who put them into effect, could be much more useful than otherwise if a great

deal of current material of such type would be available. In order to assist high-school teachers to plan instruction of the kind which is embraced by the core curriculum, a series of 22 pamphlets entitled *Problems in American Life* have been issued by the National Association of Secondary-School Principals. The series deals with 22 problems, each pamphlet concentrating on one. Titles of those pamphlets still available readily indicate the nature of the series:

No. 5. Race and Cultural Relations

No. 12. Making Our Government Efficient

No. 13. Population

No. 15. International Organization After the War

No. 16. America's Schools

No. 21. Urban and Rural Living

No. 22. Motor Vehicle Transportation in American Life

Each pamphlet is a resource unit containing a storehouse of material for the teacher. The first part of the pamphlet gives facts concerning the problem. The second part relates to teaching aids that can be used when focusing the attention of high-school students on the problem to which the pamphlet is devoted.

SPECIAL CURRICULUM FOR THE BRILLIANT STUDENT

When the seasons are changing from winter to spring and sycamore trees glisten in the sunshine, one giant sycamore in a stand of leafless black oaks resembles a ghost. At first glance the sycamore may seem to be somewhat out of place. It attracts attention. After a short time one becomes accustomed to the scene and may think no more about it. In a few weeks the leaves come out and the disparity is hidden, or at least modified. In a program of mass education the brilliant student stands out for a time and then is likely to merge into the total program. When given a special curriculum, the situation is different. The brilliant student who is given special attention is like a pine tree, or other evergreen, on the east or west coast of the United States growing among scrub oaks of its own age. As the years pass the spread between the size and usefulness of the pine on the one hand and any of the scrub oaks on the other becomes more noticeable. The same is true with the brilliant boy or girl, in contrast to the average student, if the brilliant one is provided with a curriculum adapted to his or her capacity and guided by skillful teachers.

One's achievement in life is largely dependent on two elements—his natural endowment and his environment. The genes which are the basis of hereditary factors are extremely significant but often overlooked. A carefully planned and skillfully molded environment is in many respects equally significant. Both natural endowment, and environment, must be considered. Our belief in education is evidence of this fact.

In providing suitable environment, education should attempt to adjust it to the capacities of individuals, especially for those who differ markedly



Searching for Facts

Junior and senior high schools, as well as colleges and universities, have a splendid opportunity to inculcate the love of learning and the habit of searching for and interpreting useful facts. These youth, in Grand Rapids, Michigan, are reading with a



The Use of a Globe Helps Provide a Proper Setting for the Study of Geography, History and Current Events

Through the skillful use of globes, maps, posters, charts, working models, and other visual aids, a thirst for knowledge can be stimulated in almost any child, youth, or adult.

from the average. Education should recognize nature. Much too little has been done in American schools at all levels, particularly during the first twelve grades, to provide a special curriculum for those students who have high intellectual capacity. The genetic studies of children with superior intelligence made at Stanford University by Lewis M. Terman and others. in the early 1920's and later, show that one is confronted with many baffling problems when attempting to determine which children have superior ability in broad scope. Nevertheless, the problems should be met rather than sidestepped. The development of superior natural endowment, together with the channeling of it in a socially constructive direction, is one of the important functions of the educator. How much different the world's history might have been during the last 3,000 years if a considerable number of persons with high intellectual capacity could have had that capacity developed. And, what a different picture the panorama of history would be if others, who rose to prominence, would have had their intellect channeled properly!

Americans are too cautious in labeling the brilliant student as brilliant. Mediocrity seldom wants to acknowledge superiority. In a democracy it is usually considered to be undemocratic to give special attention to the boy or girl with very high mental capacity. But this negative attitude is wrong in a democracy. It is about as wrong as was the concept of Jacksonian democracy that to the victor belongs the spoils, in lieu of a merit system in the civil service.

There is urgent need to identify the brilliant child and provide a special curriculum for him. This is pointed out clearly in a pamphlet entitled Education of the Gifted, published in 1950 by the Educational Policies Commission of the National Education Association and the American Association of School Administrators. The National Education Association and the United States Office of Education are each keenly aware of the need for developing the brilliant student. Even so, relatively little action in this direction has been taken in the United States.

Few public school systems provide much in the way of special attention for the brilliant student. The public schools of New York City, of Cleveland, Ohio, of Detroit, Michigan, and of a few other cities, however, have made progress in this direction at both the elementary and secondary levels. Montclair, New Jersey, has a special "college high school" for students selected from a large area.

Until approximately seventy-five years ago the emphasis on education in most parts of the civilized world was largely on the development of the brilliant young man. The students selected for Plato's Academy and for the medieval universities no doubt were those young men whom it was believed had superior intelligence. The students were abstract-minded persons who could master philosophy and understand large problems of life. In the Europe and England of the sixteenth and seventeenth cen-

turies, schools continued to serve a relatively small and select group of students. The Latin grammar schools in Colonial America and colleges in the United States up to 1918 rather largely preserved this tradition.

During the present century mass education in America and a tendency toward it in many other countries have to a large extent detracted attention from the brilliant student. By the law of averages a number of leaders are bound to evolve from a system of mass education. However, unless brilliant students are sought and found and developed, many of them may not go far in school or may not be benefited greatly by formal education, and thus be lost to society, as far as their full capacities go. If brilliant students are not presented with a challenge, they may become so disgusted as to do inferior work in school.

The college campus was invaded by America's mass approach to education shortly after the close of World War I in 1918. The mass approach in American higher education has proceeded so rapidly that the number of outstanding leaders found among each 1,000 persons who have been graduated from colleges and universities in the United States during the last twenty years is surprisingly small, even though the need for leaders is ever present. However, while the number of leaders per 1,000 college graduates today may be smaller than in 1900 or than in 1875, this does not prove there are fewer leaders being graduated today than would be the case of the highly selective system of previous years had been retained. Nevertheless, it appears that present curriculums are not entirely suitable for the brilliant student.

Millions of dollars are spent to devise human relations techniques, such as rating the job performance of workers, or to devise scientific processes, as for instance improving the quality of steel. Success in devising these techniques and processes depends largely on availability of capable leadership. Such leadership is one of the greatest resources a nation can possess. All countries are urgently in need of capable leadership and should develop it continuously. A nation cannot afford to neglect to select and train persons for highly responsible positions. A nation should develop leadership ability in those who by nature have some type of leadership potentiality in considerable amount. The responsibilities of leadership should not be forced to a great extent on those who have less than average intelligence, have poor judgment, or have little desire to deal with people.

The United States cannot bear without serious detriment the waste involved in neglecting to give brilliant students the attention which they need in order to develop facility in solving complex problems and in dealing with many people. Failure to adjust the high-school curriculum to the needs of the brilliant boy or girl is a matter of wasting an important resource—potential intellectual power. Intellectual power is a requisite of top-flight leadership.

It is recognized that the student who does not possess superior intellectual capacity but who loves to study, who gains pleasure from what he learns, and does very well in school, should receive special consideration too. If he is given special educational opportunities, he is apt to make a more valuable contribution than the able but indifferent person who has a frivolous nature or an emotional dislocation.

In the last decade much has been done to develop leaders. In the United States and abroad it has been done partly through special curriculums for brilliant adults, mainly between the ages of twenty-five and forty-five years. These curriculums have been set up by universities, by business corporations, and by government. Of those developed by the universities, the one found in the Harvard School of Management is outstanding. The Federal Intern Program, conducted by the United States Civil Service Commission operates on the theory that young people showing evidence of much administrative ability should be given the opportunities which are necessary to develop their potential. Personnel training directors for many corporations, industrial or commercial, and for agencies of government have been developing carefully selected employees for positions of leadership. The British Staff College at Henley on Thames, England, established in 1946, and L'Ecole Nationale d'Administration, Paris, founded in 1945, both have as their objective the training of leaders. Each of these two schools devotes its attention to adults.

The correlation between superior intelligence and success as a leader is not always very high. On the other hand, the correlation between inferior intelligence and success as a leader certainly is low. The potentialities of the brilliant student can soon be lost in a system of mass education. Therefore, it seems desirable that there should be a special curriculum in high school, and perhaps also in college, which will salvage brilliant learners and develop them into balanced persons of discernment who will become either executives and administrators, or leaders in research and writing. The devising of curriculum and the selection of students, teachers, and materials for this special education require much thought and money. The curriculum should be of the type that will prepare those with much potentiality for leadership to make exceedingly useful contributions to society. To be effective such a curriculum, like any curriculum, must be placed in the hands of teachers who are well qualified to carry it into operation and who are eager to do so.

Quite a bit of attention should be given to high-school boys and girls with high I.Q's, and perhaps to those in elementary school with high intelligence. Certainly, brilliant high-school students should be guided by teachers who have an I.Q. as high or almost as high as their own. A student with an I.Q. of 130 or 140 in a group of average youth, and under teachers with an I.Q. of approximately 100, will not progress as rapidly as he ought, especially if his teachers fail to assign to him extra work in line with his ability. Failure of the teachers to make such extra assignments may develop habits of laziness in the boy. The brilliant student in high school who is given the same assignments as others in his grade may soon become bored.

and develop into a behavior problem, owing to the fact that he does not find schoolwork to be challenging. In addition to a special curriculum to be made available for brilliant students in high school, either a special library or special facilities in the school's existing library should be set up for them. A method of teaching and assignment of work which is rather

largely individualized could be used to good advantage.

The brilliant student must be given special attention as early as the highschool years in order that a comparatively large number of brilliant leaders may be developed. It is not undemocratic to put such students in a separate class or in a separate building. The students of average capacity need not feel discriminated against any more than do boys and girls who fail to become radio "Quizz Kids." In either instance no serious inferiority complex is likely to develop as a result of not being selected for the high and unusual honor. It is much better to take the brilliant out of a class and form a new group for them, than to select the dullest and form them into a separate group. Selecting from the lower end of the intellectual scale may be necessary, but can become obvious and thus may soon place a stigma on those selected. Similarly, of course, the brilliant students selected for a separate class may develop a feeling of superiority and an obnoxious bearing, unless these dangers are anticipated. Both evils can be avoided by preparing a curriculum which keeps the student occupied and by an attitude on the part of the teachers which discounts arrogance and disdain.

Under such a curriculum, the contacts of one student with the other especially gifted students in the class and the great amount of work required of him soon show him that he is just one of his group. Parents of children for whom the special curriculum is provided should be cautioned against developing a supercilious air in their children. School authorities must lean over backward to avoid calling attention to the brilliance of the special group.

It is necessary to do a good job of selecting students of exceptional intellectual capacity and providing a special curriculum for them. It is equally as necessary to refrain from advertising these activities. By helping brilliant students discreetly, society is helped in general and a better world is built, for progress and happiness depend largely on capable and

honest leadership.

When organized and conducted properly, the special education of the brilliant high-school student is not uneconomical in a large city, nor offensive to the other students. In a small city, however, the brilliant student presents a different problem, and one which in some cases creates a situation that can be met only with a great deal of difficulty.

Determining which students in a high school are brilliant learners is not an easy matter. Selection should start with giving an individual intelligence test to all students in the school who are doing better than average work. There is an advantage in going a step further and having available an I.Q. for each student enrolled, as some boys or girls may hide their mental ability under a cloak of disinterest in school. Some with high intelligence do only reasonably well, or poorly, in terms of school grades attained. This is because they are bored with the curriculum and the teachers, or because they have physical handicaps or emotional conflicts which have been unnoticed or ignored. Even so, these students may be learning a great deal, as they cannot avoid doing so on account of their ability. Other boys and girls in high school with only an average or slightly above average intelligence may be receiving high grades due to studying diligently, memorizing well, and co-operating fully with their teachers. The intelligence test disregards grades attained and assists one to secure an additional source of information as to an individual's intellectual capacity.

The intelligence testing should be done only by a test expert who is qualified to administer intelligence tests. Those students having an I.Q. of or above a certain figure, perhaps 125 or 140, should also be given achievement tests in order to measure their progress in different subject matter fields in terms of school grades. A boy fifteen years old, in the tenth grade, may have an I.Q. of 135, a ninth-grade achievement in social studies and a twelfth-grade achievement in mathematics and science. These variances can indicate either interest, ability, or good instruction in

one field and not in the others.

High intelligence and low achievement may indicate poor reading ability due to poor instruction in reading. The brilliant learner needs a superior reading ability. He needs to read reasonably fast, should know on first reading what he has read, and should be able to evaluate it relatively well.

The intelligence and achievement tests will narrow to a small number those in a high school who should be provided with the special curriculum. When the results of the intelligence and achievement tests are supplemented by observation of the small group of students to which they call attention, and are also supplemented by an analysis of the out-of-school activities and family background of those students, an appropriate selec-

tion should ensue.

Basing the selection of students for whom the special curriculum is to be provided entirely on the results of intelligence tests, or even on the results of intelligence and achievement tests alone, may be a very unwise practice. Attitude of the boy toward study, his attitude toward classmates and toward children several years younger than himself, the extent to which he is contemplative and judicious, or erratic, for his years, and his degree of industriousness or laziness are important factors to keep in mind when selecting from among those who have made high scores on both intelligence and achievement tests. In addition it is well to wrestle with questions such as the following: How much creative ability does the boy or girl under consideration seem to have? Does he or she exhibit ability to lead others by directing group activities? In class discussions does he or she

generally evidence insight and reasoning ability? Is he or she the thinker

and problem-solver of the group?

An individual with an I.Q. of 140 or unusual ability, for his age, in one field, such as art, music, or mathematics, may not be nearly as well balanced intellectually and emotionally as other students having an I.Q. of 140. In determining which boys and girls shall be provided with the special curriculum, an effort ought to be made to choose those who show promise of developing not only rapidly but also broadly and lastingly under superior instruction and supervision.

It is recommended by this writer that the testing, observing, and analysis be carried on during the first semester of the tenth grade, that the special curriculum for the brilliant learner start at the beginning of the second semester of the tenth grade and extend through the eleventh and twelfth grades. By providing an entire semester in which to make the selections, they can be made appropriately. In the tenth grade, when students move from junior to senior high school or begin their sophomore year in a

four-year high school, they are beginning to mature rapidly.

In dealing with superior students in high school one should, however, not expect a fifteen, sixteen, or seventeen year-old to be a super man or super woman. By comparison with most adults, a high-school student is immature, even though beginning to mature rapidly. But in spite of relative immaturity, high-school students who have superior intelligence can benefit greatly from a curriculum which is adapted to their degree of intelligence, if that curriculum is administered by highly intelligent, imaginative, but stable persons who do a masterly job of teaching and if a library adapted to the needs of these students, and up-to-date laboratory equipment, are available.

For brilliant high-school students, the bulk of the curriculum that is used for other students in the second semester of the tenth grade and which is used throughout the eleventh and twelfth grades could serve satisfactorily. To it could be added many unusual assignments of the type which will give the student freedom and responsibility. Instead of pinning the student to daily assignments and daily testing, both of a routine nature, he can be given large assignments which will cause him to do much reading in different sources and which will compel him to draw his own conclusions and perform experiments, under whatever supervision may be

necessary.

Assignments should be found for the brilliant student which will be challenging to him. Usual or minor assignments which might bore him should be avoided. He should be instructed and then left alone to work on his own initiative, with an awareness that teachers can be consulted when he wants their advice. He should know that he has freedom coupled with opportunity and the responsibility to show results. He should be given latitude to use his ingenuity in proceeding with assignments. As few limits as possible should be placed on the number of books he may draw from

the school library, and special arrangements might be made for his use of other local libraries. However, in order to develop systematic habits, the student should be required to return a book within the usual two weeks or four weeks after drawing it from the library.

When the brilliant student enters the last half of the twelfth grade he should be put on his own to a considerable extent, but teachers should keep in close touch with him. They should be available in person at nearly all times during the day and by telephone during specified hours in the evening and on Saturdays. A staggered schedule could be provided so as to impose no undue after-hours burden on any one teacher.

If the special classes for brilliant students are limited to a maximum of twenty students each, there would be much opportunity for individual assistance of the kind which an intellectual person gives to his protégé. With no more than twenty students to a class, the teacher can help each member of the class to select and plan individual projects.

There are disadvantages in permitting any students to skip a half year or a year of class work during the elementary or high-school years. Time is necessary for one to digest and understand the facts and principles included in the elementary and secondary curriculums. Furthermore, it is difficult to schedule instruction for one student which he missed by passing over a grade. A balance between mental capacity, physical development, and social and intellectual maturity is important and points to the wisdom of having a boy or girl receive twelve years of planned educational activity before being graduated from high school. It is desirable to give the rapid learner extra work from year to year which is pertinent to the curriculum of the respective grades.

Regardless of how rapidly the brilliant student learns, he might well be kept in high school for the remaining two-and-a-half years and be given assignments as speedily as he can assimilate them. The special student should be given extensive exploratory work of a high-school level in the technical fields (mathematics, chemistry, biology, and physics) and in the humanities and social studies (literature, language, history, economics, political science, sociology, and geography) so that he can decide intelligently, with the help of his teachers, which of the two large areas he should enter as a career. Topnotch leaders are needed in both fields.

By staying in the special high-school class for the full two-and-a-half years, the brilliant student remains in an atmosphere where the tempo can readily be adjusted to his ability. He remains with students who have approximately the same degree of maturity as himself. He can live at home until sufficiently grown up to adjust well to college life away from home. If he is permitted to go through the tenth, eleventh, and twelfth grades in two years or in a year and a half, he may want to go through college in three years. No matter how brilliant he may be, he is almost certain to lack maturity at nineteen or twenty years of age and will be handicapped

in assuming a full-time out-of-school position of leadership at that tender age.

Just as the special curriculum for the brilliant student in high school should not have as its aim the shortening of his stay in high school, so it should not have the object of making him a specialist before entering college. The special curriculum should be broad and ought to introduce numerous types of experience. Many of the students who will be provided with this curriculum will become specialists at a relatively early age. In high schools, through an intensive schedule which moves along as rapidly as the student can take it, there will be sufficient time to provide a broad and solid foundation for a life of far-reaching activity. The special curriculum for the brilliant should enlarge his views of life considerably and give him opportunity to use his capacity to reason. It should encourage him to search for facts, and to think until he finds the reason for selected occurrences or conditions which he has been asked to read about or to observe. The curriculum should also be designed in such a way as to make him sharply aware of his obligation to contribute to human progress. The special curriculum should incorporate features which will develop the student's initiative and expand his capacity for work so that he will strive until accomplishing worthy goals. The special curriculum should teach him how to deal effectively with people.

All this is a large order for two-and-a-half years in high school. During that time much can be done to develop young minds of superior capacity. Upon being graduated from high school after having the advantage of the special curriculum, the student can profit much from college work. If he is also provided with an appropriate four-year special curriculum in college, accompanied by excellent instruction and supervision, and completes it satisfactorily, it can be expected that he will be well qualified to embark on a significant career. If he fails to go to college, the special curriculum in high school will not be without value. Having learned to search for facts and to think, he will be in a favorable position to progress rapidly on jobs to which assigned.

The special curriculum for the brilliant student should probably infuse additional items into the existing curriculum for the last two-and-a-half years of high school. The combination of the following seven items, in conjunction with the high-school curriculum, will tend to develop an acceptable attitude and good judgment, elements not always possessed by brilliant persons, but which should be possessed by any leader who wields a considerable amount of influence.

1. How to build a constructive attitude. The brilliant student has been endowed with superior intelligence. He and she should not look with disdain on those who learn more slowly than themeselves. The brilliant should not capitalize selfishly on their superior intellect. If they do they will be a menace to society in a great or small degree. A spirit or helpful-

ness toward others and a good attitude toward life in general tend to pro-

duce stability without stagnation.

The special curriculum should teach brilliant students, discreetly, that, due to their fortunate natural endowment, they have a responsibility for others, but that this responsibility should be exercised wholeheartedly rather than grudgingly and in a way that shows patience in dealing with people instead of a roughshod authoritarianism or coddling. The curriculum should teach that an attitude of disdain or paternalism ought to be shunned. It should also teach avoidance of a prima donna complex and any tendency toward erratic and irresponsible behavior in the name of genius. As in any curriculum, there should be a teaching of respect for persons and ideas worthy of respect.

The special curriculum should keep the brilliant student so busy that he does not have time to build up a superior feeling toward less gifted students and toward the world in general. This curriculum should make him so conscious of obligation to use his intellect for human welfare rather than for personal gain that a lasting constructive attitude will be built

within him.

The brilliant student ought early to become aware of the fact that leadership consists as much of work and restriction of personal freedom as it consists of glory. However, painting such a dark picture that will prompt highly gifted students to select easier paths than those of leader-

ship should be avoided.

As the brilliant student's leadership ability and judgment are developed, his impulses toward kindness should be nurtured. There are already too many leaders who operate in a coldly calculating and scheming way. Warm, wholesome personality which is genuine is essential in a leader. A leader should be both wise and kind. If he possesses these two qualities, he will have a constructive attitude.

2. How to budget time. Appropriate budgeting of time is a large factor in success. Time lost can scarcely be regained. It is almost irretrievable. The person who can usually handle one more task of importance is the person who budgets his time well. Many people are so busy with trivial things that they do not have time to devote to important matters.

Being able to determine the relative importance of the different tasks which one undertakes, and assigning to each an approximate amount of time, is necessary in order to budget time wisely. If a person's time is not budgeted, he will be imposed on and may easily be drawn away from im-

mediate and from long-range objectives which he has in mind.

Time is one of the most important possessions of an individual. If it is not budgeted appropriately it will be squandered. The person who learns early in life the value of time and how to budget it well has prospects of being highly productive. Before being graduated from high school the brilliant student should be taught how to budget his or her time. Owing to his superior intellect, the brilliant student can finish ordinary school

assignments quickly and have time on his hands. This is an important reason why he should have a special curriculum. He should be taught how to make good use of the extra time which will result throughout life from his high intelligence.

3. How to write a factual statement. Persons in positions of leadership find it necessary frequently to write or direct the writing of reports of a wide variety, and to evaluate them. Most of these reports have little use except for the facts which they contain. A concise factual statement prepared carefully has power. The brilliant student in high school can benefit from instruction and practice in writing factual statements of the type which summarize an occurrence or advocate a plan of action.

It can be pointed out to the student that a factual statement must be based on facts, that the facts must be relevant to the subject of the statement, and that they should be worded clearly. The value of brevity, combined with a moderate amount of citation of selected actual cases or happenings to illustrate the facts being presented, can be called to the student's attention. He should be shown that sweeping, general, unsupported assertions have no place in factual statements.

The brilliant student can profit from instruction and practice in writing factual statements. This curriculum emphasis will enable him to prepare reports and articles when called on to do so in future years, and to do so without great waste of time.

4. How to examine written material for internal consistency. A leader needs to be analytical. He has occasion to decide on the merits of plans coming to his attention. Such decision requires objective scrutiny. Plans are presented orally and in writing. Through teaching the brilliant student in high school to examine published and unpublished material for internal consistency, it is possible to develop the ability to scrutinize objectively plans which are presented in writing or in conference.

The brilliant student should be taught to examine written material, published and unpublished, with a view to determining whether or not all the statements in a particular piece are in harmony with each other. Careful examination of many materials will reveal glaring contradictions. These contradictions are found in books and articles and in unpublished correspondence and reports. Internal inconsistency in written material warns the alert reader that confidence in the material will be misplaced.

5. How to reason and how to apply ideas. The human mind has the power to reason. This power is a guiding faculty which distinguishes human beings from animals. The process of reasoning enables one to comprehend and to infer. Reasoning produces ideas. An idea is a plan, an intention, or a concept. Unless the ideas are applied (tried out) they are of no more productive use than a hook-and-ladder piece of fire-fighting equipment in the middle of a large and completely arid desert.

Although Alexander the Great (356-323 B.C.) should not be held up to students as exemplary on all counts, there are phases of his life which are worthy of attention. Plutarch (c. A.D. 46-120), the famous Greek biographer, tells an incident of Alexander's boyhood which shows how the young Alexander, apparently less than sixteen years of age at time of the incident, reasoned and applied an idea which resulted from his reasoning. Plutarch relates the incident in Section VI of his biography of Alexander. The section is found on pages 237 and 239 of Volume VII of Plutarchs Lives as translated into English by Bernadotte Perrin and published by G. P. Putnam's Sons, New York, in 1919.

Briefly the incident is as follows. One Philoneicus brought the now well-known horse Bucephalus to Alexander's father, Philip II, King of Macedon, and offered to sell the horse to Philip for a very large sum (thirteen talents, which might be equivalent to approximately \$120,000 today). When the horse was approached, he seemed savage and entirely unmanageable. He refused to be mounted, disregarded Philip's attendants, and reared against them. Philip thought that the horse was wild and unbroken and ordered the horse to be taken away.

The boy Alexander showed his displeasure at the decision. After exchange of many words, it was agreed by Philip and Alexander that Alexander should attempt to ride Bucephalus. Immediately, Alexander ran to the horse, took the bridle-rein and turned the horse towards the sun. It seems that Alexander had noticed that the horse was much frightened by his shadow falling and moving about in front of him. By turning the horse toward the sun, the shadow would not fall in front of the horse. Plutarch states "and after he [Alexander] had calmed the horse a little in this way, and had stroked him with his hand, when he saw that he was full of spirit and courage, he quietly cast aside his mantle and with a light spring safely bestrode him. Then, with a little pressure of the reins on the bit, and without striking him or tearing his mouth, he held him in hand; but when he saw that the horse was rid of the fear that had beset him, and was impatient for the course, he gave him his head, and at last urged him on with sterner tone and thrust of foot."

This incident shows that a brilliant student reasoned after observing, and then applied the idea which resulted from his reasoning. The application was successful. This kind of reasoning and applying of ideas is needed urgently in matters which relate to the common good. It is the function of the teacher to develop in students, particularly in brilliant students (due to their capacity), reasoning and application ability, and to guide this ability toward ends which are useful, rather than harmful, to society.

6. How to think in broad terms. In order to be a useful leader one should think broadly in behalf of human welfare. In addition to building a lasting constructive attitude within the brilliant student, the curriculum

should include that which will teach him to think in broad terms, so as to obtain a proper perspective of the problems with which he will deal throughout life.

At least two ways, in combination, can be used to teach the brilliant student to think in broad terms. One way consists of having him make a

critical study of important principles such as:

 Separation of governmental powers between the three branches of government—the executive, the legislative, and the judicial—so as to provide checks and balances.

Malthusian Doctrine, that population tends to increase more rapidly than the means of subsistence and that humanity is, therefore, faced with serious problems as the world becomes more and more populated.

3. Darwinian theory of the origin of species and interpretations which

have been given to it.

Gresham's Law, that sound money will be forced out of circulation by unsound or depreciated money.

5. The law of supply and demand.

Mere memorizing of important principles as an intellectual exercise is not appropriate, and having a scant speaking acquaintance with them is not enough. The student should understand the principles and be able to use them in his thinking. Such mastery will assist him to think in broad terms.

A second way to teach the brilliant student how to think in broad terms is to call his attention to a problem and then lead him on to consideration of a larger problem of which it is a part. For example, the study of soil erosion within a 20-mile radius of the student's home can lead readily to a study of soil erosion throughout the nation, and to consideration of wasteful lumbering practices, to stream pollution, and to the problem of conservation of natural resources in general. In connection with a problem beginning with local soil erosion and extending to the over-all conservation of natural resources, the student may be led to consider more or less remotely related basic principles, such as the separation of powers, the Malthusian Doctrine, the Darwinian theory, Gresham's Law, and the law of supply and demand.

Attention to problems such as the following give much opportunity to use in combination the two ways to teach the brilliant student to think in broad terms:

- 1. Rights and duties of citizenship.
- 2. Causes of poverty.
- Raising the nation's standard of living through improving the productivity of workers.
- Providing a recreational program for the city or city and county in which the student lives.

- Decreasing loss by fire in the city and throughout the county in which the student lives.
- Decreasing traffic accidents within a 50-mile radius of the student's home.
- 7. Decreasing crime in the state in which the student lives.

In considering any of these seven broad problems, relevant basic principles can be studied and the student can be led from a local, immediate, or small part of the problem to the point where he can see the total problem clearly. Then he or she can scarcely avoid thinking in broad terms.

7. How to plan and direct the activity of a group. There is not necessarily a close correlation between high intelligence and the type of leadership ability used in personally directing the actions of a group of people from day to day. However, the person with high intelligence is likely to be able to develop such leadership ability if instructed along this line at an

early age.

All leaders must deal with people, although the leader in research and writing may find it less necessary to deal with people than does the person who is an executive or an administrator. Therefore, the special curriculum can well afford to require the brilliant student to gain firsthand experience in dealing with people. This experience can be secured by having the student actually plan and direct the activity of a group of boys or girls, or both, no older than himself. The group to be directed can be a group of usual type high-school students participating in an extracurricular activity of the school, a church group, a boys' club group, a YMCA group, and the like. Where it can be arranged conveniently it may be desirable to select an under-privileged group for supervision, as experience with such a group will assist the brilliant student to understand the problems of unfortunate people.

In planning and directing the activity of a group, the brilliant student should consult with his teachers concerning plans and should report to his teachers and analyze with them the strong and weak points of his planning and directing of the group. The planning and directing could well be carried on part-time, during the entire last year in high school. In the instance of a brilliant student who is particularly mature for his age, it can be started earlier than the twelfth grade, especially if a suitable group

for his supervision is in need of a leader.

Even though some learners selected for the special curriculum will become leaders in research and writing with a minimum of responsibility for direct supervision of other people, this experience in planning and directing the activity of a group will be useful to them. It will broaden the student's ability to understand problems of leadership. Many people have a tendency to find use for that which they understand. In addition, this planning and directing of group activity gives teachers one more good opportunity to determine the type of leadership for which a student is fitted.

ASSISTANCE FOR THE SLOW LEARNER

In relation to America's program of mass education, two conflicting schools of thought are noticeable. One contends that attention should be concentrated on the large majority of students—the middle group. The other school of thought favors spending much of the time, energy, and facilities available for instruction on those students who are most urgently in need of help (such as the slow learner) or who will benefit greatly from it (as for instance the brilliant student).

As would be expected, the problem of the slow learner in school is found mainly at the elementary and high-school levels. If the slow learner enters college, he will probably have improved his rate of learning to the point where he is no longer an obviously slow learner. The problem of the slow learner is a triple problem which can be stated in the form of the following three questions:

- 1. Why is he slow?
- 2. What should he be taught?
- 3. How should he be taught?

Why is a boy or a girl a slow learner in school? Why is he (or she) falling behind the average in his group as far as completion of school work is concerned? The answer to this problem should be found before making a special curriculum available. Does the pupil have low intelligence or poor vision? Is his hearing satisfactory? What is the general tone of his physical and mental health? Is he developing more slowly, physically and mentally, than the average pupil of his age? If he is sluggish in action and thought, can it be that the thyroid gland has become diseased and that he only needs hormones extracted from thyroid glands in animals? Does he have a general disinterest in or dislike for school? Is his slow rate of learning due to having many distracting outside interests, or does his family disparage school? Could it be that he has not learned to read well and, therefore, has difficulty in keeping up with his class?

Answers to these questions, and further thinking on the problem, seem to lead one to the conclusion that a boy or a girl is a slow learner in school due to at least one of the following more common conditions: (1) unfavorable attitude toward his or her teachers or toward subjects and activities in the curriculum, (2) insufficient concentration on school work during and after school hours, (3) defects in vision or hearing which may not be readily apparent, (4) mental deficiency which may or may not be detected easily, (5) poor instruction from time of entering school, or during one or more years since entering, and (6) poor health.

Occasionally a teacher is much surprised that a boy who appears to be very dull in school can do things after school hours which require a keen mind and which the teacher himself cannot do, as for instance at a distance of 100 feet name correctly the make and year of model of every automobile as it passes down the street, Buick, 1956; Chevrolet, 1945, and the like.

Why is the boy able to learn to do such things out of school during the months or years when he appears to be dull in school? We learn about the things in which we are interested. Comparatively little learning takes place which is unaccompanied by interest. The teacher must find for the slow learner an interest with which to start. The experience-centered curriculum assists very much in finding that interest. When the interest is found and when the slow learner becomes enthusiastic about school and receives suitable instruction, he is likely to progress reasonably well in classwork unless his intelligence is much below the average or is be-

coming defective because of disease.

After determining why a pupil is a slow learner, something should be done about the matter. It is the province of the school to increase the usefulness of any person. Furthermore, it is highly possible that through determining why each slow learner is not keeping abreast of his or her class and doing something about the lag, many individuals can be salvaged. As a result of studying each slow learner in a school and taking careful action in every case, a number of useful results can be attained. One learner, although slow this year, may begin to realize that he is making progress. Within the next three years he may become an average learner due to being stimulated and given exactly the kind of assistance which he needed. Another learner, with relatively low intelligence, may continue at a slow rate, but nevertheless continue, and thus avoid developing an inferiority complex.

Some children cannot see from where they are sitting, what is written on the blackboard. Others have difficulty in hearing what the teacher or others are saying unless close to them. If faulty hearing or poor vision is the cause of slow learning on the part of a pupil, remedial steps should be taken. When cases of upside-down vision and other eye handicaps are discovered, the assistance of specialists should be secured. The reading clinic at Ohio State University has made remarkable progress during the last ten years in improving perception of persons who have difficulty in

following and visualizing a sequence of printed words.

Legasthenia is a condition which is generally due to need for instruction in reading rather than to a mental or physical defect. Printed or written symbols may be meaningless to persons having legasthenia. Even if their vision is perfect, they may not associate meanings with or derive meanings

from the symbols which they see before them."

In the event that a boy is learning slowly due to inability to read well, he should be provided immediately by the school with appropriate coaching in reading so that he may stay with his class or return to it within a semester. Standardized instruments, such as the California Reading Test, are exceedingly useful in determining the amount and type of remedial instruction in reading which a pupil may need. The California Reading Test, published by the California Test Bureau, 5910 Hollywood Boulevard, Los Angeles, is published in four levels. The intermediate, for grades

seven, eight, and nine, measures the student's reading vocabulary by means of 22 items dealing with mathematics vocabulary, 23 dealing with science vocabulary, 23 with social science vocabulary, and 22 with general vocabulary. It measures reading comprehension through the use of ten items requiring the student to read and follow directions, 15 items requiring knowledge of the parts of a book and the use of a table of contents and index, and 30 items calling for the interpretation of meanings of paragraphs which are printed in the test booklet.

Many are slow in arithmetic, or in another subject, owing to the fact that a parent or other adult may have discouraged the learner or belittled the subject prior to his school years or while in early grades. Many are slow because of caustic statements and punishment used in the classroom by a teacher. Telling a girl that she will never learn arithmetic, or cracking the fingers of a boy with a ruler, especially in full view of a group, for being slow to comprehend instruction tends to develop humiliation and resentment. It also tends to create an inferiority complex in regard to arithmetic or a hatred for the subject. Encouragement by teachers and parents will help build the learner's self-confidence and his ability to learn.

If the boy, or girl, is not interested in school, tactful stimulation should be provided by the teacher. If outside activities or negative home influence are the cause of slow learning on the part of a boy or girl, the school should do a counseling job designed to improve that boy or girl's speed of learning. These remedial measures apply wherever the slow learner is found in the first twelve grades, whether in the early years of the elementary school or during the high-school years. By helping the slow learner, many boys and girls will be graduated from high school who will otherwise drop out before reaching the twelfth grade.

The problem presented by the slow learner is not solved by pushing him routinely from grade to grade so as to stay with his class. If he has an I.Q. of approximately 90 or above and does not meet the standards for promotion, he should be left behind. After failing for a semester or for a year, he should be given a great deal of attention so that he will profit from repeating a semester's or a year's work.

Frequently the slow learner has ability in some worth-while direction. It is the duty of the school to find that ability. In the instance of the person who is far below average intelligence, the ability should be developed by the school. In the case of the one who is slow in school because of disinterest, rather than because of low intelligence, the newly discovered ability can be used to create in the learner an interest in the existing curriculum.

Boys and girls entering the tenth grade who have an I.Q. of approximately 90 or above and who have been slow learners for more than a year in spite of counseling and correction of any serious defects in vision, hearing, or reading might well be provided with a special exploratory period. It could be of one or two hours' duration daily for the first month of the

first semester of the tenth grade, or could be extended more than a month. The exploratory period could be used to find a worth-while ability in the slow learner and to create an interest in him in his special ability. The ability might center about an occupation or an avocation.

A large room outfitted with many types of books and with the tools and equipment of a number of well-known occupations for men and women; a separate, but connecting room, containing arts and crafts equipment and supplies of a hobby nature; and a third, another connecting room, having an assortment of musical instruments, should provide sufficient variety to arouse the curiosity of any high-school youth of sound mind. Two or three versatile teachers moving about in the three rooms and giving information and instruction when not resented can quickly find abilities in the boys and girls assigned to the exploratory unit. Where possible, the newly discovered ability in plumbing, hair styling, leathercraft, or playing a banjo should be used as a means of interesting the slow learner in the existing curriculum, rather than to make of him a plumber, and the like.

When the boy is shown that a plumbing contractor must know much about mathematics in order to estimate the cost of an installation and when the boy becomes convinced that he has an ability for mathematics, it may be relatively easy to interest him in mathematics. When doing well in this subject, it is but one more step to show him that he can also do well in other subjects. In the event that he is resistant to the curriculum and shows interest only in plumbing and in mathematics, then in his social studies course he can be given a special project relating to government regulations of plumbing. By using curriculum approaches of this type, boys and girls in the tenth grade who are slow learners because of disinterest in school are likely to finish high school creditably. If, however, twenty per cent or more of the pupils in either a junior or a senior high school are slow learners because of disinterest in school, it is high time to overhaul the entire curriculum or to examine the way in which the curriculum is being put into operation.

It is frequently believed that the problem presented by the slow learner can be solved almost automatically by having him take vocational education of a general nature, or by sending him to a trade high school after completing junior high school so as to prepare for a skilled or semiskilled trade. Careful consideration should be given to any tentative decision to prepare the slow learner for a skilled trade, especially if his slow learning is due to low intelligence. Vocational education, either in the comprehensive high school or in the trade high school, is not a dumping ground for those who lack normal intelligence or who do poorly in school for other reasons. A person who is successful in the vocations is not just "hand-minded." He has the ability to read and to reason within his field. To be successful over a period of years in a skilled trade or other occupation of comparable status, a man or woman must have quite a bit of technical information and trade judgment and needs almost average in-

telligence in order to acquire and use that technical information. Nevertheless, the person who is a slow learner as a result of low intelligence can be taught simple vocational skills of the type in which he or she shows a continuing interest.

When it is believed that the slow learning may be due to low intelligence, a test expert should administer an individual intelligence test so that the I.Q. can again be determined. When it is found in this way that the slow learning is caused by low intelligence, the problem becomes complex, especially in a thinly settled rural area. In a large city the pupils can be separated on the basis of the I.Q. A special curriculum can be furnished each group thus formed.

Thousands of jobs in America can be done just as well by people with an I.Q. of 80 and a good attitude as by people with average intelligence. Persons with an I.Q. of 70 or 60 can also perform necessary work. Through the effective use of a special curriculum for the slow learner, those with low intelligence can become useful citizens. Even so, it should not be anticipated that the special curriculum, in the hands of the most competent teachers, will develop a person of low intelligence into a leader of many people.

Psychologically it is not very sound to separate the slow learner in other than fairly extreme cases, for, by this separation he is almost certain to be tagged as "dumbbell," and the like, by other school children and youth of his community. Except where intelligence is relatively low, he probably should not be placed in a separate class which has a special curriculum. It may be far better to permit him to remain with regular classes and attempt to interest him by giving individual attention. In this way he is not apt to be tagged as a slow learner by his classmates, and may soon increase his rate of learning. A special curriculum should, it is believed by this writer, be provided for the slow learner only when it is definitely determined that he has insufficient intelligence to keep up with a class of normal students without undue strain on himself.

There are two types of mentally handicapped persons, the feeble-minded and the insane. Both types have difficulty in learning. A feeble-minded person has low intelligence from early life. An insane person is one who had a normal mind but is mentally sick to such extent that he must be supervised closely as a matter of safety for himself and others. The feeble-minded are of three degrees—idiots, imbeciles, and morons. The insane, the idiots, and the imbeciles are likely to be found in institutions or confined at home. They have little capacity for learning and are usually easy to recognize. They need to be supervised much of the time by persons who are expert in dealing with mental defectives. Hence, these unfortunates belong more in the area of custody and special treatment for the mentally defective than in the sphere of the school.

The moron, however, presents quite a different problem. He is rather difficult to recognize. He is found in school and, like other children, be-

longs there. Later in life he may move from job to job or become an object of charity or a participant in crime. Mentally he develops as much as do children ranging from eight to twelve years of age. The psychologist defines the moron as a person having an I.Q. as low as 50 or as high as 69. In spite of mental deficiency the moron is able to learn a considerable number of things when he is taught in a simple and concrete way.

The lowest grade of moron has an I.Q. of 50 to approximately 57, and can scrub and mend and perform other similar tasks. Middle-grade morons have the ability to do good work of a manual and routine nature, under supervision. High-grade morons can do routine work, including the operation of machinery, without being supervised closely. Most morons can be happy in performing useful tasks which a person of average or superior intelligence considers monotonous or too elementary. Morons can get along fairly well in a simple environment. When life becomes intricate for them, they tend to become frustrated and may develop into a serious problem for those with whom they associate. The frustrated moron in school may be sullen or may become abusive to the teacher or to classmates, or to school property. In the adult years when frustrated he may walk away from his job and neglect machinery which is in operation, and may quit his job without warning, or with unreasonably short notice. On occasion he may be insulting to fellow workers or to his boss or may damage property deliberately because of his inability to understand an environment which has become too complex for him. A person of normal intelligence and reasonably good judgment would be much less drastic under exactly the same conditions, and, in fact, might not find them to be intricate and disturbing.

Morons may do fairly well in elementary school. However, because of insufficient mental equipment many parts of the present junior high-school curriculum are too difficult for them. These pupils should, especially on reaching junior high-school age, be given a curriculum which emphasizes rather simple vocational skills and a simple philosophy of life.

By placing high-grade morons in one group, when approximately twelve years of age, and giving them a special curriculum, it is possible to avoid serious frustration in school for them and to prevent their hindering the progress of a class consisting of normal children. Low-grade morons of approximately ten years of age could likewise be formed into a group with middle-grade morons being sent to either the high or low group, whichever is administratively feasible during any particular school year.

Much basic research needs to be done in order to determine the types of learning services which can be made available advantageously to those who have low intelligence. The Forward Look, the Severely Retarded Child Goes to School, is the title of U.S. Office of Education Bulletin 1952, No. 11, published in 1952. In that bulletin Arthur S. Hill speaks of severely retarded children as probably having an I.Q. of 55 or less. He states:

The vast majority of mentally retarded children are enrolled in the elementary and secondary schools of many districts where they are receiving little or no special assistance. No one knows how many are not in any school at all.

Most mentally retarded boys and girls, with the proper help, may become valuable assets in their own homes and local communities. The less severely retarded have proved their competence for citizenship and productive employment; . . . many of the more severely retarded may be helped to contribute to family life and to participate in useful activity under sheltered conditions. However, neither the less severely retarded nor the more seriously afflicted children can realize their full potentials unless there are provided the necessary opportunities for growth and development during their early years. 'The mentally retarded who are not benefited by appropriate school services represent too frequently unrealized resources for which society pays in terms of support and the maintenance of institutions for permanent care.

These statements indicate that the low-grade moron, as well as the one with an I.Q. as high as 69, deserves a special curriculum.

After it has been determined that certain boys and girls are slow learners due to low intelligence, and after they are placed in a special class, they should be given assignments which are within their ability. The nature of a special curriculum for the slow learner whose retardation is caused by low intelligence will depend on the extent to which his or her intelligence is below average. In the thickly settled part of a large city it will be possible to group slow learners by intelligence and age. It is conceivable that in a tenement area there might be twenty children ten years of age with an I.Q. of approximately 80 and another similar sized group of ten-year-olds with an I.Q. of approximately 65. Under the best conditions all members of both groups are likely to be slow learners in competition with children having an I.Q. of approximately 100 or more. If placed in regular classes, some members of either of these two slow groups, may develop an inferiority complex. Some will soon dislike school because of their inability to do well in it. The curriculum is too difficult for them and has not been prepared for them.

The action to take would be to separate these slow learners from other children and place them in two different slow groups. One special curriculum could serve both slow groups. It would be pitched to a higher learning level for the one special group than for the other owing to the difference of intelligence of the children in the two groups. In either instance, however, the curriculum should probably center around four significant elements:

- Teaching reading and having the class members read the things which they enjoy.
- 2. Teaching the joy of accomplishing productive work.
- Teaching simple vocational skills which interest the class members and which are within their mental comprehension and suited to their degree of manual dexterity.

The skills to be taught could be determined largely by the use of an exploratory period in the sixth or seventh grades.

It could be conducted in much the same way as the exploratory period for the tenth-grade slow learner (discussed above) who is not mentally deficient, but on a more simple level. In spite of mental deficiency a moron can have special ablity. Some morons can play a musical instrument far better than can many persons with an I.O. of 125 who have never given serious attention to music. By means of the exploratory period, which could continue for an entire semester, special abilities can be found in children who have considerably less than average intelligence. In the exploratory unit the mentally slow child can find what he or she likes best and can do best. This finding will give the child self-confidence. During the exploratory period, a boy may find musical instruments distasteful and may find that he enjoys assembling the parts of a small electrical device, the assembling of which requires finger dexterity. In a few days, with the assistance of the teacher, he may indicate aptitude for assembling small parts of intricate

4. Teaching social studies with a view to developing a sense of social responsibility in the individual and an understanding of the social order in which the class members live so that in spite of inferior intelligence they will be able to do a bit of thinking for themselves rather than being led blindly by various types of agitators.

Curriculum items selected for the moron who is approximately twelve years of age or older need to be simple. Hand work, such as weaving, sewing, working in leather, carpentry and cooking, lends itself well to a curriculum for the mentally deficient as the learner can readily see his or her progress in such work. The methods of instruction and the instructional materials, as well as the items of instruction, need to be simple. Text and reference materials which are used should have many pictures and charts. A variety of visual aids should be used during the instruction and should be used patiently, since the learner with less than average intelligence is not likely to be abstract minded. For him explanations must frequently be demonstrated or visualized in other ways. Instruction must be to the point and easy to understand. Like any twelve-year-old child of normal intelligence, the twelve-year-old moron can understand the texture of a piece of woolen cloth by looking at it and then feeling and tearing it. Unlike a twelve-year-old child of average intelligence, he will comprehend little as a result of reading or hearing an abstract but precise description of its texture. When instructing morons, there is little use in presenting many facts at a time or in discussing theories, for morons have insufficient intelligence to do much in the way of rapid assimilating of facts or abstract reasoning.

Teachers who are to handle a curriculum for morons should be especially selected and trained. This curriculum can be put into operation in one

or more rooms in an elementary school or in a junior high school or in a separate building belonging to a city school system.

The slow learner, regardless of whether having an I.Q. of 65 (or even somewhat lower), or 80, or 90, should be given as much assistance as he requires, including a great deal of individual attention. A teacher should not give him additional assignments until he finishes satisfactorily or fails on the one on which he is working. Several assignments at the same time made by the same teacher tend to confuse or discourage him. Patience and expertness are required of the teacher who works with the slow learner. Bringing the curriculum to him by means of visualizing, by giving individual instruction, by counseling, by encouraging, and by proceeding slowly and patiently tends to avoid frustration for him. Such methods enable the slow learner to advance and see his progress. This personal awareness of progress in turn stimulates his desire to learn.

EDUCATION FOR THE EMOTIONALLY UNSTABLE

Possessing emotion is one of the main differences between a statue and a living person. To give a precise and an all inclusive definition of the term emotion would be difficult, especially since there are several schools of thought which each define it differently. In short, an emotion is a response to a stimulus. It is, in fact, a stirred-up condition or state of feeling of a human being. This response often takes the form of a very noticeable feeling like anger accompanied by the impulse to attack, and fear accompanied by the impulse to escape.

An emotion typically involves mental and physical reactions. These reactions are based on glandular activity and frequently are accompanied by muscular excitation. Emotion surges when a situation gets out of hand. In strong emotion, perspiration may appear in beads on the skin.

Among the physical reactions which are seen at a time of emotion are facial and other expressions. They are noticeable in connection with exclamations of surprise and in evidences of joy, grief, and hate. Crying, sobbing with grief, clenching of fists and waving them in anger, screaming, hilarious laughing, jumping up and down in a fit of rage, and readiness to engage in physical action such as to help or to strike someone are well-known signs of emotion.

From the time of infancy and from the first day of school most persons are taught to cultivate their emotions so as to use them but to keep them under control. They are taught to laugh and enjoy themselves, but not to burst into spasms of anger. Most individuals control the outward expression of their emotions very well by the time they become adults and do a good job of moderating or even concealing their emotions. Not so with the emotionally unstable, and there are many such persons of school age and beyond.

A well-integrated nervous system which functions in a healthy and normal way produces emotional stability. Emotional stability means control of the emotions—using those which are good, avoiding those which are harmful. Life without emotion is not life. Life with uncontrolled emotion is bedlam. When people fail completely to control their emotions, they act as if they were madmen or animals. Yet, like fire and water, emotions serve a good purpose if used properly.

The emotionally unstable person is subject to abnormal excitability. Physical or mental factors caused by heredity and environment are responsible for this instability. Various theories have been advanced concerning the hereditary basis of emotionality. These relate to the degree of balance between one's sympathetic and para-sympathetic systems and variations in the functioning of the ductless (endocrine) glands, as, for instance, the adrenal glands.

Numerous school children suffer from physiological imbalance due to improper working of endocrine glands. For example, a boy or girl from a family of any economic condition may have a hyperthyroid condition. The condition may not be obvious to a teacher, although the student's behavior suggests that something is wrong. A boy with a hyperthyroid is over-active and over-excitable, in proportion to the seriousness of the case. His heart beats too fast and his blood pressure is high. He may have difficulty in sleeping and at times has a tendency to have feverish hallucinations. He has much energy, consumes much of it, and is an annoyance to others.

Unfortunate home conditions, too, are responsible for some individuals being poorly adjusted to life. Among the environmental factors in the maladjustment of children are (1) lack of discipline at home and the consequent difficulty in accepting discipline at school, (2) family strife, and (3) the broken home.

A psychiatrist, or an endocrinologist and a psychologist working as a team, can do a great deal to assist emotionally unstable individuals. Except with help and the will to improve, a person with serious emotional instability is unable to exercise control of his or her emotions in a way similar to that done by a normal, stable person. The emotionally unstable person has unnatural changes of mood. These changes vary from frequent and sudden outbursts of violence or hilarity to prolonged periods of sadness, despondency, and fear.

Emotionally stable people use ordinary good judgment in avoiding for themselves and others the harmful effects of emotion. People who are emotionally unstable need to be taught to restrain their emotions to such extent that other people will not be harmed. In learning how to avoid harmful effects to others, the emotionally unstable will learn to decrease the amount of harm which they do to themselves.

The person who is justifiably angry but refrains from raising his voice in anger, and from flourishing his fists, deserves credit. Through his selfcontrol the anger lessens or completely disappears and he causes no harm. Self-control has stepped to the front and saved the situation. Relaxation in contrast to tension avoids the harm which can be produced by improper use of the emotions. When all muscles are relaxed, one cannot remain dangerously angry. Benjamin Franklin, an excellent psychologist in many respects, advised that, in case of anger, one should count ten, and if very angry, to a hundred.

Sorrow, as well as anger, causes emotional problems. Seclusion and concentration on grief produce despondency whereas constructive activity, the assuming of a spirit of cheerfulness, and associating with other people tend to diminish the sorrow. Through special assistance the emotionally unstable can be taught to deal wisely with anger, grief, and other emotions.

The number of persons in the United States who are highly unstable emotionally, and therefore a public problem, is very large. No one can determine the total number of these people since it is difficult to define precisely what constitutes serious emotional instability, but only a small proportion of such persons are confined in public or in private institutions for the mentally sick. Among the emotionally unstable whom we meet almost daily on the street and in the grocery store are men, women, and children having neuroses. A neurosis is a mental disorder which may be mild or severe, but usually not severe enough to demand treatment in an institution for persons who have become mentally deranged. A person with serious emotional instability may be suffering from a neurosis and, therefore, have a maladiustment which causes him or her to be different from a person who is happy and well adjusted to life. People with a neurosis worry much and are likely to be nervous, troublesome, and fussy. They are likely to have mannerisms, obsessions, or phobias and may have hysterical behavior. They seldom become insane but are an irritation to themselves and to those about them.

Unless known to be dangerous, or unless he is the child of intelligent and reasonably well-to-do parents, a boy of school age who is in need of a great deal of care on the part of a psychiatrist, endocrinologist, or psychologist is likely to be sent to school rather than to an institution which is specially equipped to be of assistance. Therefore, an exhaustive survey would probably reveal that a considerable number of children and youth in need of special instruction and care due to serious maladjustment are sent to American public schools to receive standardized instruction supplied for those who are in normal physical and mental health. Usual curriculums, which may fit the needs of normal individuals, may be of little value to the person who is emotionally unstable to a very marked degree. If in addition to having serious emotional disturbance a pupil is a slow learner because of low intelligence, it may be wise for the school to attempt placement in a suitable institution for at least a few months, so that appropriate treatment can be given to a double problem, but particularly to the part dealing with emotionality. If the emotionally unstable pupil is a slow learner due only to maladjustment and to disinterest in school, it is believed that the curriculum proposed in this section can solve his dual problem of emotional instability and slow learning.

The study of abnormal human behavior is in such a pioneer stage that many questions concerning serious emotional instability cannot be answered satisfactorily. Nor do we know exactly how to deal with persons who are highly unstable. Schools must face the problem and must do much experimenting in co-operation with psychologists, endocrinologists, and psychiatrists in order to find an increasing number of accurate answers to it.

The school's problem of dealing with the emotionally disturbed person ranges from that of the teacher being faced with a class containing two or three elementary or high-school pupils who are on the fringe of serious frustration to that of the city school superintendent who finds several thousand children and youth in day school and numerous adults in evening or part-time day school for whom he plans to start special classes and provide psychiatric assistance. The problem of dealing with the emotionally disturbed person is rather common in the elementary school, in the junior high school, and in the senior high school. On the college level it is less noticeable because of the use of rather high standards for college entrance. Physical examinations in colleges maintaining high standards rule out admission of applicants having serious emotional disturbance. Furthermore, most college students are in good physical and mental health and in a stage of life which is filled with hope rather than with childhood fear or adult reflection on the problems of a work-a-day world. One can expect to find, among those desiring to enroll in adult night school, persons in their 40's or 50's who have serious emotional conflicts and who think night school can do something almost magical for them. Such persons, as well as emotionally unstable children and youth in school, should be given assistance by the school. This means that the curriculum of the elementary and high school and of the adult night school should take into consideration the special need of these unfortunate persons. It does not mean, however, that the emotionally unstable should be over-protected by the school, for one must recognize that most of these children, youth, and adults will not receive much extra protection outside of school.

Good teachers in elementary and high schools do much to correct emotional instability before it becomes serious. The adult night school is enlarging its curriculum and, thereby, is providing assistance for unstable men and women who take advantage of offerings for adults. Nevertheless, special curriculums are necessary at the elementary and high-school levels and in adult night schools so that children, youth, and adults with serious emotional instability can be helped to meet with confidence and initiative the problems and frustrations of life.

The highly unstable person in school creates a problem which involves counseling and methods of teaching as well as curriculum. What should be taught, and when, is particularly important in the instance of the unstable learner. It is foolish to drive the emotionally unstable child through the regular allotments of those parts of the curriculum which he

detests, at the time he detests them most. If he dislikes spelling, it seems useless to force it on him right now, but sensible to emphasize subjects which seem to upset him least, and intersperse them with participation in athletic games to improve physical health and a spirit of teamwork, and with vocational activity aimed to develop a small amount of skill but a great amount of steadying influence and self-confidence. As stability is being built, there can be a gradual and judicious return to the subjects which it appears he needs urgently.

During the last fifteen years hygiene and human relations courses have been included in the curriculum of quite a number of senior and junior high schools and elementary schools. This addition to the curriculum is useful as it can assist pupils to understand, to some extent, the importance of mental hygiene and how to manage their own lives so as to reduce tensions and emotional conflict. Courses in mental hygiene and human relations meeting for a few hours per week are not likely to be adequate, however, for those pupils who have serious emotional disturbances. Those pupils cannot benefit fully, and sometimes benefit very little, from the curriculum which is in operation throughout the school system.

In cities of 100,000 population, or more, it is practicable to separate from normal pupils for at least a semester the elementary or high-school boy and girl who are highly disturbed emotionally. When this separating is done it should be done in a way that calls as little attention as possible to the separation. Labelling students because of their emotional instability will not increase their composure. Instead, labelling may cause them to be resentful or to feel crushed. The separating of the emotionally unstable students from other learners should be done on a temporary basis. When the individual gains a reasonable amount of emotional stability he or she ought then be returned to classes which operate under the usual curriculum.

It would seem that a psychiatrist, or, as mentioned previously, an endocrinologist and a psychologist working as a team, should study each pupil who appears to be highly unstable. The emotionally unstable pupil probably should be removed from his or her class and placed elsewhere in the school or school system with a separate group only on psychiatric diagnosis.

In quite a few cases the emotionally unstable pupil receives much therapy by associating with persons of normal balance. For this reason, unstable children and youth should be kept in regular classes if, in the psychiatrist's opinion, it is appropriate to let them remain with their classmates. When the psychiatrist recommends that an unstable pupil shall stay in the regular class, the pupil should no doubt be provided with the same or substantially the same curriculum as is furnished the other members of the class.

When the emotionally unstable person is not separated from the usual type of class, his teachers should receive suggestions from the psychiatrist

as to kind of attention they ought to give the student and how to give the special attention without being obvious about it. Teachers of separate groups for the emotionally unstable, too, should receive frequent suggestions from the psychiatrist. These suggestions would concern methods of dealing with the group as a group, and with those individuals in the group who present a particularly difficult problem.

Separate classes for the emotionally unstable should be under the supervision of a psychiatrist. The teaching should be done by teachers who are stable but not austere. They ought not resemble totem poles. Like teachers of any group, they should have a wholesome view toward life and a type of personality which makes them easy to approach. Teachers of separate classes for the emotionally unstable have a duty to exhibit happiness, approval, and disapproval in a normal way. They should not have rapidly changing emotions which are in sharp and clashing contrast to each other as such changes will fail to promote emotional stability in their students.

Parents of children placed in a separate group should be contacted by the teacher or by the psychiatrist to the extent of developing an atmosphere in each child's home which will promote stability and complement rather than nullify the stability which the child is acquiring in the separate class.

The curriculum for the separate group must certainly be designed in such a way as to diminish emotional tension. It is the function of this curriculum to build a sense of security in pupils who lack a sense of security, and in the egocentric a sense of personal responsibility. Providing pupils with a sense of security or a sense of personal responsibility as needed does much to ward off future emotional disturbance.

In order to diminish emotional tension the curriculum should provide for activity and comparative freedom in the classroom. Activity, doing something, and being permitted freedom to talk and to move around as long as accomplishing his or her assignments and not interfering with others in the class, is a tension safetly valve for a student who is emotionally unstable.

The curriculum should provide for variation in both activities and tempo. Alternation of periods of study, playing of games, group discussions, and the like within the span of one day furnishes appropriate variety. This special curriculum should be so flexible that it can change rather much from week to week within the limits of a broad framework. The nature of this change will depend on the range of instability represented by the class and the progress being made by a majority of the class members.

The problem of emotional instability is one which needs much study. There are many kinds of personality disorders. Serious emotional instability results from numerous conditions. It can be corrected in quite a few different ways. Study of the problem by elementary, high-school, and adult night-school teachers, and by psychologists, endocrinologists, and psychiatrists should indicate how the curriculum can be geared to the

needs of particular types of these maladjusted individuals so that school can be a very beneficial and stabilizing force for them.

The curriculum for the emotionally unstable should take into consideration that some of the people for whom it is prepared may have almost no emotional control, that many of them are unpredictable, that many lack ordinary good judgment, that a large percentage make little effort to face reality and, therefore, do extremely foolish things, frequently making instantaneous decisions with apparently no thought of the consequences, and that some of these individuals are very immature for their years. The curriculum should, therefore, include features requiring use of judgment on a small but gradually accelerated scale. It should also provide the emotionally unstable person with either study assignments or jobs of a manual type, or both, which are neither too simple nor too complex for the individual, and, in the case of jobs, not beyond his or her physical capacity. The individual should be taught as rapidly as feasible to be responsible for satisfactory completion of designated work.

Curriculum items ought, naturally, be selected which seem purposeful to the learner and which lend themselves to the giving of praise during each day, immediately after a satisfactory completion. Those play and work activities which help the erratic person to become less erratic should be included in the curriculum. No doubt weaving on a simple rectangular or square frame or on a hand loom, basket making, and many other skills taught by the occupational therapist can be incorporated advantageously into the public school's curriculum for the emotionally unstable. Teaching weaving can teach one to stick to a job and to do the job well. Through instruction in weaving, excess nervous energy can be consumed at a time when it needs to be expended so as to avoid a violent outburst or other unfavorable reaction. Furthermore, the instruction in weaving can be made a starting place for the teaching of simple textile designing and for the teaching of arithmetic, geography, and history as they relate to weaving.

Those who are taken out of the usual classes in elementary school or in high school can be brought together into groups which are somewhat homogeneous from the standpoint of chronological age, degree and type of instability, and school grade (fourth, fifth, etc.). When this regrouping takes place a special curriculum can be used beneficially. It should be exceedingly flexible, but for children and youth it should include as much mathematics, English, science, and social studies as it seems that the individuals in the group can profit from so that, if a child spends his fifth or ninth school year in the special class, he can carry on in the sixth or tenth grade without loss of time.

Where possible to do so it seems well to use the subjects in the curriculum in such a way as to show the maladjusted student the need for stability and the importance of the individual. This can be done by pointing out to the learner how both Theodore and Franklin Roosevelt overcame

serious physical handicaps and rose to the highest position in the nation, and how hundreds of outstanding characters in history suffering from slight stature, poor health, or nervousness attained places of prominence in government or made significant inventions through dogged perseverance. American history and English and American literature are filled with choice inspiring morsels which can be used to teach personal stability.

The special curriculum for the person with serious emotional disturbance should permit much flexibility so that almost any item can be handled at almost any time during the semester and so that not all members of the class need be taught exactly the same things. This latitude will enable the teacher to match the curriculum with the shifting needs of the class members.

For some emotionally unstable persons an individual curriculum (not just a course of study within a curriculum for all emotionally unstable students) will be necessary for a time. A half dozen or more such persons, classified according to somewhat general types, and each provided with a different curriculum, can be taught simultaneously by a specially qualified teacher who has available the kind of equipment and space which the

various individual curriculums require.

The curriculum for the unstable person can well take into consideration that part of the day which is not spent in school. Stability can be fostered by encouraging after-school hours reading of books of the kind which ease rather than excite the mind and which deal with the thoughts and activities of well-adjusted persons. Novels and biographies and books dealing with nature or handicrafts selected to fit the temperament of the individual provide a stabilizing influence. In the instance of children whose parents spend little time at home or give little attention to the child, it is particularly desirable that the curriculum suggest activities for after-school hours. They can include, in addition to reading, such activities as gardening, even though only in a window box, or simple cabinet making, soap carving, or knitting.

These curriculum principles for emotionally unstable children and youth are generalities, but need emphasis and should be adapted to the situation at hand. For adults these same principles in somewhat modified form, this writer believes, can be used. A competent teacher can work within these generalities and use them at least as a start. Perhaps the curriculum for the emotionally unstable might well emphasize particularly the follow-

ing five items.

1. Physical health. Physical health should be promoted since it is the basis for mental health. Instruction in hygiene is appropriate, with emphasis on personal cleanliness, good habits of eating, working, playing, and sleeping. A study of what constitutes a balanced diet for persons of the age being taught interests almost any learner and is a foundation stone for physical health. Having both boys and girls play games, such as volley ball and soft ball, provides necessary physical exercise. Games should be

organized in such manner that all will play and within the limits of their physical capacity. The playing of games which produce moderate rivalry and which are supervised by one who stresses good sportsmanship does more than promote physical health. It assists in developing a spirit of group loyalty and fair play as well.

2. Discussion of real life situations with a view to building a feeling of security and a sense of responsibility. Discussion, rather than avoidance of real life situations of the type which the emotionally unstable person has difficulty in facing, can strengthen stability. Harm is done by devising a curriculum which shelters the child from any mention of such situations. The curriculum should introduce the emotionally disturbed child to real life situations when he can accept them, and as rapidly as he can accept them. These real life situations should be introduced in order that the child can gain an understanding of his own problems. When he understands what his problems are, he can begin to meet them and to build stability.

By having a group of emotionally disturbed children discuss problems which worry them, it is possible to dispel worry. On the other hand, there are many instances where this discussion should be limited to a counseling

situation between the teacher and one pupil at a time.

A teacher can start a group discussion of such problems as perseverance, tolerance, faithfulness to a friend, or fear of being attacked when alone. The teacher can start the discussion by telling a personal experience, by reading or summarizing a story, by showing a motion picture, or by having the class members enact a short one-act play. The talking, reading, projecting, or acting should be confined to approximately ten mintes. Then the teacher should encourage the class members to discuss freely the problem to which attention has been directed and should lead them on to tell how they think the problem can be solved and to relate similar experiences of their own.

This encouragement can cause class members to discuss problems which are uppermost in their own minds and help each class member to see that he or she is not the only one who has problems. The disscussion can result in sympathetic understanding of the problems of others, and in self-confidence and increased ability to handle personal problems. If a discussion becomes heated, the teacher should let it continue rather than impose ideas on the group. Through becoming heated the discussion will serve as a safety valve for pent up emotions, and the teacher will have an excellent opportunity to learn much about the real personality of those who enter freely into the discussion.

3. Fostering a spirit of group loyalty and fair play. A feeling of being left out of a group, of not belonging, causes tension and fear. On the other hand, a feeling of belonging bolsters one's self-confidence and self-control. It gives one something to be loyal to and can produce a desire to be loyal, and to play fair.

A spirit of group loyalty and fair play can be developed by including in the curriculum a number of group activities. Among these are athletic games of the type where two teams play each other, in contrast to track and field events and swimming where participation can readily emphasize the individual more than the group. Athletic games and other group activities selected should be those which lend themselves particularly well to teaching esprit de corps and justice.

In any sort of group function, all members of the class should participate actively. When attention is given to athletic games, all members of the class ought to be drawn in as players. By different means which occur to the teacher from day to day, a feeling of isolation should be eradicated from each pupil, as a feeling of isolation tends to cause the emotionally unstable persons to become still more unstable. Finally a crescendo, in the form of a panic reaction, may be built up unless the feeling of isolation

is avoided.

Providing supervised competitive sports of a team variety is a practical way to develop self-control of a child or youth with normal bone and muscle make-up and ordinary co-ordination of movement. The leveling influence of participating in athletic games teaches consideration for others. Those who participate learn to abide by the umpire's or referee's decision and to see the need for team work.

As emotional stability of the group increases, a number of the more capable members of the group might be given responsibility for making decisions, as for instance refereeing a volley ball game for a few minutes at a time and umpiring a soft ball game for one inning now and another at a later game. Students who make these decisions will enlarge their fair-play experience in doing so and will indicate their sense of fair play, or absence of it, from the standpoint of arbiter as well as player.

With continued improvement of emotional stability of the group, each team might play a team from a class of normal students. This experience would provide additional opportunity to teach group loyalty and fair

play.

Special projects such as production of plays also give opportunity to foster a spirit of group loyalty and fairness. The thoughts can be stressed that this is "our" play and that "we must each do our part well to make it successful, and not all of us can have the leading parts this time, nor next time," and that "we must stick to our lines until we know them thoroughly so the play will be a success."

It has been found that art has much use in relieving children of tensions. Drawing and painting should, therefore, be included in the curriculum for many children who are suffering from emotional instability. Where drawing or painting seem to be a stabilizing influence for an adult with serious disturbance, either or both might well be made part of that person's individual curriculum. A teacher can suggest to a group that it plan a large "wrapping paper" mural. After the plan is agreed upon, each member of

the class can be asked to draw one part of the mural. Sharing crayons, ink, paints, and brushes, and doing his or her part of the mural well can all be capitalized on by the teacher in developing a spirit of group loyalty and fair play by means of this type project.

If the emotionally unstable children or youth comprising one class possess a bit of musical ability, the curriculum could profitably include instruction in group singing, and perhaps the formation of an orchestra. For some groups of unstable students, music can be taught in such way as to develop group loyalty and fair play. At the same time, the instruction and practice in music can be as soothing and constructive as drawing or acting.

By including geography, civics, and history in the curriculum, these subjects can be taught to the emotionally unstable in such a way as to show that genuine progress of a nation, a local community, or a person depends on a spirit of loyalty to all people and fair play at all times. Class members can be divided into work squads of three or four each with every squad being responsible to develop a scrap book or other project, fitting into a class project on a phase of geography, civics, or history. This assigning of work can be used to foster a spirit of group loyalty and fair play at the same time that competence in subject matter is being acquired.

The importance of group loyalty and fair play can be emphasized through introducing "bees" and quizzes in the teaching of history, spelling, geography, and the like, organizing the members of the class into two or more teams, and making class members responsible for selecting and asking the questions.

4. Safety instruction. The erratic person is vulnerable to dangerous accidents and endangers others. Instruction which inculcates habits of care in those persons is of great value. Safety instruction for the emotionally unstable should be pointed toward making them aware of danger and how to avoid it.

Safety instruction must be handled discreetly, especially for the emotionally unstable. It should proceed slowly in order that class members will not be terrified by what can happen to them during a moment's lapse of carefulness when on a ladder or near a moving vehicle or beside a stationary machine while it is in operation. Discussion of fatal injuries, especially those involving mangling and much suffering, can be upsetting rather than helpful. The placing on bulletin boards of clippings concerning horrible accidents, and a grusome type of poster concerning safety may do much more to harm than help an unstable child. Virtually scaring people to death does not seem to be an appropriate way to teach safety even to persons of stability.

Starting the safety instruction by giving attention to simple and obvious hazards such as walking when a shoe string is untied and can cause tripping, or carrying a large package in a way that you cannot see where you are going is likely to start a pattern of constructive thinking concerning the everyday problem of safety.

The instruction should be aimed at developing a "safety consciousness" which operates almost subconsciously. A safety consciousness which is implanted gradually and firmly will have the result of comparatively safe living during both work and play.

5. Assignment of work with a view to developing a further sense of responsibility. Work assignments of both the manual-job type and bookstudy type can be considered. For some groups of emotionally disturbed pupils most of the time devoted to work assignments may need to be given to the manual-job type of assignment. Either of these two types of work

activity can be a measure which prevents further instability.

The work assignments for the emotionally disturbed person should be of a nature that the results of the work can be seen by the learner. Also, the work assignments ought to be of the kind which the learner considers worth doing during the time allotted daily for work assignments. This occupation with assignments which they consider worth while enables emotionally unstable pupils to enjoy the work. Some assignments will provide them with an opportunity to gain a sense of achievement in terms of social values. For instance, with supplies provided by the school, it is possible to have the emotionally unstable person make something which is to be used by the school or by the Red Cross. Even though it may be practicable to spend only ten or fifteen minutes a day in this way, the individual will be able to see the results of his or her work, and will realize that it is a productive activity rather than "busy work," and that the success of the job depends on his or her doing it right.

The sense of responsibility to be developed through assignment of work should perhaps be mainly an individual sense of responsibility for an assignment made to one student rather than a sense of his or her responsibility for a group project. In other words, through work assignments one pupil should be made responsible for accomplishing a definite piece of work which has been assigned to him. The work can range from weaving a simple pattern, building a table, a model airplane, or a ship model, or making an apron or a dress, to drawing a map or writing an essay.

Assignment to and instruction concerning manual operations should make the class members aware of their responsibility to avoid waste of supplies and damage to equipment. Assignment to and instruction concerning non-manual operations, as for instance the writing of an essay, should point out the individual's responsibility to handle facts carefully and to delete irrelevant material, so that slip-shod habits will be side-stepped and lifelong habits of accuracy and systematic thinking will be formed instead.

Work assignments, whether of the manual-job type or of the book-study type should be made in terms of the capacity of the individual learner so as to avoid his or her becoming frustrated as a result of the assignments. Constant activity, especially of a hurried or excited kind, should be guarded against during the daily work periods. A let up for relaxation occasionally may be necessary. At those times the teacher can call the attention of the entire group to certain basic facts concerning one's responsibility to others, and can give commendation before the entire group to individuals in the group who are exhibiting a sense of responsibility.

In making the work assignments and when instructing and supervising the students during the work periods, the emphasis should probably be on the individual. There ought to be a minimum, if any, competition between the pupils. Commendation should be given to each for creativeness, pride of workmanship, economy in use of supplies, and accuracy of performance on either of the two types of work assignments.

EDUCATIONAL OPPORTUNITY FOR THE PHYSICALLY HANDICAPPED

A large number of physically handicapped Americans of public school age do not receive adequate schooling. Earl James McGrath, former United States Commissioner of Education, pointed, on page 14 of his annual report published in 1951 by the Government Printing Office, to the plight of physically handicapped children and youth. He stated that approximately two million persons between the ages of five and nineteen are suffering from results of infantile paralysis, cerebral palsy, blindness or partial blindness, loss of hearing, cardiac ailments, speech defects, and the like, but that less than one quarter of these are receiving special educational services through public school systems.

It can be assumed that many of the other million and a half children and youth with physical handicaps need special educational assistance and are not receiving it. Whether they are confined in bed at home, or are hospitalized, or able to attend school, many of them can benefit from instruction offered by public schools and fitted to their particular needs.

A child who learns to read and write and make simple computations while confined to his bed for many months, or several years, and then spends his days in a classroom in a wheelchair with other physically handicapped children can catch a breath of hope. He will probably acquire manipulative skills which will enable him to operate a machine requiring a full-time attendant, or be prepared to handle a variety of jobs which can be performed while sitting at a desk. Through providing a curriculum of special instruction for that child, the nation's manpower is increased and a person is raised from despondency to self-support. He avoids illiteracy and learns how to find the good things of life.

The curriculum for the physically handicapped can and ought to be very flexible. It calls for the use of numerous ways of bringing to the individual the kind and amount of instruction that he or she can master and use. A curriculum for physically handicapped youth between the ages of twelve and eighteen years who require a special curriculum must be particularly flexible, and, in some senses, more so than for any other group

of learners in America's entire educational system. The curriculum for the physically handicapped child and youth should provide for individual instruction in private homes, as necessary, and for group instruction in classrooms and shops which can be entered by wheelchair on ramps of very gradual slope. The curriculum should take into consideration the fact that some children will be totally blind, others totally deaf, others without the ability to pronounce words distinctly, some without hands or with no control over them, some without legs, and that some of the physically handicapped children will be brilliant while others will be of normal mental ability, and some will be dull.

With intelligent interest in the problem and through the use of imagination, a widely varying curriculum can be fashioned to assist the physically handicapped child whether he or she is found in a large city or in a rural area. In some instances similar services probably should be extended by the public schools to persons who become physically handicapped early in their adult years who are not provided with vocational rehabilitation service by the Veterans Administration or by an agency of the state in which they reside.

Unless suitable schooling is furnished to physically handicapped children and youth, they may turn out to be very much of a burden to themselves and others. Suitable schooling, which in some instances means education and in many a combination of education and vocational training, results in an entirely different condition. Blind, deaf, mute, and crippled persons can do much useful work. Through developing in them a good attitude toward life, and vocational skills, they become an asset rather than a liability to a community.

Physically handicapped individuals have some remarkable abilities. Persons who are blind or deaf have a way of becoming exceedingly keen and quick in the use of senses which they possess, thus developing special abilities.

It has been maintained that the eye is responsible for eighty-seven per cent of preception. Whatever the actual figure may be, if it could be determined accurately, the eyes are exceedingly important. If one closes his eyes for five minutes and then attempts to walk down a stairway and out-of-doors without opening his eyes, he rapidly comes to the conclusion that eyes are a highly essential factor in perception. Nevertheless, a blind person can overcome in part his loss of sight. Through instruction he can increase his hearing and touch perception. Likewise, the power of observation can be developed to a surprising extent by the deaf, mute, and crippled.

Helen Keller, born in 1880 in Alabama, was deaf, mute, and blind from infancy. She was graduated from Radcliff College and became an author of outstanding rank. A number of persons either blind or deaf have been graduated from leading American universities and achieved distinction in many professions. The deaf have succeeded in nearly every occupation they

have undertaken, but of course they are not suited to be policemen, street-car operators, and the like due to their handicap. Graduates of Gallaudet College in Washington, D. C., an institution for the deaf, supported by the Federal government, have become ministers of religion, editors, publishers, teachers, artists, architects, chemists, and farmers. It is not uncommon for blind persons to be proficient in sewing, typewriting, piano tuning, weaving, chair caning, broom making, basketry, furniture repairing, gardening, and poultry raising. Many blind persons are just as productive workers as are normal people. Whether they work in a small factory assembling toys or work at home making rubber mats, brushes, mops, or leather belts by hand, they can earn all or part of their way and build their own morale.

Other physically handicapped people, as well as the deaf and the blind, find many ways of enriching their lives through work and recreation adapted to their needs. Paralyzed legs do not make it impossible for one to operate a linotype machine. A girl, who is so crippled that she can scarcely walk, can be a success as a bookkeeper. The necessity for checking an endless number of routine reports and performing other tasks which can be done at a desk in an office furnish job opportunities for large numbers who can neither hear nor talk or who are unable to walk. For those with lesser handicap, the outlook becomes still brighter. A one-armed man is at much disadvantage in doing repair work in a steam heating plant, but, if well trained in the routine operation of such a plant, he can manage it better than a man with no physical handicap and little training in steam plant work. For the last ten years there has been a shortage of persons trained to operate the thousands of steam plants which are found in factories, schools, hotels, office buildings, apartment houses, and hospitals across the country.

There is hope for the crippled as well as for the blind and the deaf. By adapting curriculums to the needs of the physically handicapped many of them will learn to entertain themselves and will master vocational skills. These two achievements will result in these individuals becoming self-

respecting, self-supporting, and happy.

The deaf, the hard-of-hearing whose hearing cannot be made reasonably good within a few months; the blind, near blind, or partially seeing; the crippled; the cardiopathic; and the speech defective need educational as well as medical and surgical attention. Many, even the pitiably paralyzed, can profit by organized educational activity from the time they are of nursery school age until they are eighteen years old.

There are three main ways in which to provide the physically handicapped child with suitable instruction—(1) place in a state residential school, (2) place in a separate class or school in public schools and provide a special curriculum, and (3) place in public school classes composed of normal children or youth.

The American School for the Deaf, a private institution in Hartford, Connecticut, was established in 1817. It was the first residential school in

the United States for physically handicapped children. Today stateoperated residential schools for the deaf and the blind are found in most of the forty-eight states and a number of the states operate hospital schools for crippled children.

If noticeable mental deficiency accompanies a serious physical handicap, it is probably wise to place the child in a state residential school. An individual with an I.Q. of approximately 65 or less and a physical handicap of a nature that is likely to remain throughout life, such as blindness, can profit comparatively little from a regular or special curriculum of full-time instruction offered by a city's public school system. Whether a child with a serious physical handicap and an I.Q. of 80 should be sent to an institution or be taken care of in public schools will depend on a number of conditions. Among these would be availability of special instruction and equipment needed by the child, the desire of the parents and the child, and the attitude of the community toward this type of case. A separate decision in each case may be preferable to a rigid policy.

When the physical handicap permits and is accompanied by approximately average or better intelligence, the child should live at home and attend school during the day. As an example, it is very practical in the instance of children who have been blind, deaf, or cerebral-palsied from infancy to have them live with members of their family and be taught in a separate class in public school for a few years. By attending a nursery school which takes into consideration their needs and then a kindergarten. which also provides assistance, they will receive an early start in making an adjustment to life which adjustment may require a number of years. The blind, the deaf, and to a lesser extent the mute and the seriously crippled who can move about, can profit by being placed in special day schools, following kindergarten age, to learn to read, spell, write, and do simple arithmetic. Arrangements of this type are better than living in an institution at a tender age. Living under normal conditions of family life and going to and from school daily assists them to adjust well to the life of a normal community.

When physically handicapped children living at home and attending a special class reach the age of nine, ten, or twelve years, it can be decided whether they should enter a class of normal students or continue under a special curriculum. In quite a few cases those who are blind, mute, or crippled can get along reasonably well with an ordinary junior high-school curriculum after they have satisfactorily completed the equivalent of the first six grades of school.

No special curriculum is necessary for those children who have an average or better intelligence and who can hear normally, see well enough to read, have full use of one hand, and who walk at least fairly well with the aid of a cane or crutches. If, however, a child is highly sensitive because of a physical handicap, perhaps because it involves objectionable facial scars or absence of an eye or very awkard deformity of back, arms,

or legs, it may be well to have him or her attend a separate class or, if the parents can afford it, a private school. In these cases there probably is no need for a special curriculum from the standpoint of ability to grasp instruction. In spite of physical handicap, such individuals will have the ability to perform any one of many existing payroll jobs after leaving school. It is when a person has a physical handicap such as blindness, deafness, or absence of both legs or both hands which will limit drastically ability to learn under or meet ordinary classroom conditions and limit the range of jobs which he or she will be able to handle that a special curriculum is desirable. Only when the physically handicapped child or youth has difficulty in carrying on with normal students at their pace and in their way, and faces a very restricted job outlook, should he be separated from the normal students and provided with a special curriculum.

When the special curriculum is provided it should consist of adaptations which enable the student to absorb instruction readily. The blind should be taught to read Braille. The deaf should be taught to read the printed word as do normal people and to read facial expressions, lip movements, and movements of throat muscles so as to understand what people are saying. The legless ought to be seated comfortably in their wheelchairs at tables which can be raised or lowered so that the student will have a suitable working surface for writing, for mathematical calculation, for reading, and for use of small tools or instruments.

Two publications prepared by Romaine P. Mackie and issued by the U. S. Office of Education provide data which are helpful to persons having the task of planning a curriculum for physically handicapped boys and girls of elementary-school age. The one publication is entitled *Crippled Children in School* (Bulletin 1948, No. 5); the other, *School Housing for Physically Handicapped Children* (Bulletin 1951, No. 17).

The special curriculum for the physically handicapped, whether they are children or youth, should be of the type which (1) will create a reasonably philosophical attitude on the part of the handicapped person and (2) prepare him or her to perform useful tasks the completion of which will yield to the handicapped person a sense of accomplishment, and, to the person who remains under the special curriculum until leaving school, a respectable livelihood. These two objectives are fundamental.

It may be difficult for the teacher to understand the plight of the student with a physical handicap, for he has much greater problems in a competitive world than have most persons. It is well to point out to the physically handicapped their similarities to normal people rather than their dissimilarities. Attention can be called to the fact that they eat in the same way, digest food in the same way, and laugh in the same way as do others.

As the physically handicapped child becomes older, by the time he is ten or twelve years of age, it is well to point out to him the vocational opportunities which will be within his grasp. His self-confidence is built



Planned Experiments Help Develop Judgment and Sustained Thinking

This high-school chemistry teacher requires his students to conduct a series of experiments and then asks them to interpret the results.



Judgment Is Developed Through Practice in Judging

This high-school agricultural teacher had advised his students how to select seed corn. Here he is giving one of his students an opportunity to put the advice into practice by actually judging a number of ears and indicating why some are suitable and why others are not.

in this way and by enumerating and describing jobs in which he can excel (such as piano tuning for the blind due to their well-developed sense of hearing) or for which he can at least compete satisfactorily and, therefore, be self-sufficient. Mention of the occupations for which he is not qualified should be made discreetly when mention of them is necessary.

Emphasizing ways in which he can find happiness and help humanity and minimizing reference to his limitations are appropriate. To encourage in a realistic and non-patronizing way and to avoid discouraging him are essential. Such approaches will teach him to take life philosophically and to strive in a direction in which his handicap will not be an insurmountable obstacle.

An enterprising superintendent of a city's public schools who desires to provide educational opportunity for the physically handicapped can secure information concerning a curriculum, teaching methods, and teaching devices suitable for the physically handicapped from specialists in the United States Office of Education, in the state department of education in a few states, and in the public school system of a few cities such as New York, Chicago, and Kansas City (Missouri). The Division of the Blind in the Library of Congress and the state library in various states make available many articles and books in the form of phonograph records (talking books) for the education and enjoyment of blind persons. Other organizations also provide service which is valuable to the city superintendent of schools who desires to furnish educational opportunity for various types of physically handicapped persons.

It is believed by this writer that special educational services for the physically handicapped children and youth of a city should center in one public day school whose principal should be responsible for integrating all such services for the entire city. These would be provided in (1) the city's regular nursery schools and in its regular kindergartens, (2) in the one special day school, and (3) at the bedside of children and youth of public school age who are confined to their beds for a period of several months or

more owing to rheumatic fever and other diseases.

It is recommended that all children and youth between the ages of six and eighteen years who have approximately average or better intelligence and a serious physical handicap, but who can be moved daily, should be brought together in the special public day school. It may seem very unorthodox to suggest that the blind, the deaf, the badly crippled, the cardiopathic, and others for whom a great deal of special instruction and facilities are necessary, all be sent to the same school, especially since some very excellent schools for the blind, others of first rank for the deaf, and still others of superior quality for the crippled are now in existence as separate entities.

This writer recommends the bringing together of a city's physically handicapped of various types in one public day school for the following reasons:

- Many of the basic educational needs of all children between the ages of six and twelve are similar.
- 2. The instruction by a city of its children and youth having various types of physical handicap presents a very expensive problem unless individuals are consolidated to some extent into heterogenous groups, due to the relatively small number of individuals by type of handicap and by age group. A state residential school for the blind, for instance, typically serves an entire state. When a city conducts but one public day school for the physically handicapped, it will be able to justify providing an instructor for the blind, an instructor for the deaf, a physiotherapist and the like and daily medical care as necessary.
- It is desirable for physically handicapped children and youth to live at home and travel to school daily rather than be institutionalized. Their contacts at home and in day school make for normal living.
- 4. At a public day school accommodating individuals with various types of physical handicap there will be a constructive mixing of students rather than a segregation of the blind from other persons, or the deaf from those who are not deaf. This mixing can be used to teach the deaf to be thankful for eyesight, the blind for speech and the like and to develop a sense of responsibility for others rather than self-pity. These are necessary steps in preparing a physically handicapped child to become a part of the community in which he or she lives.
- When a public day school for the physically handicapped operates efficiently and becomes well-known, many children who otherwise would not receive adequate schooling will be brought to its doors.
- 6. Physically handicapped children and youth should be placed in regular school whenever, and as soon as, possible so as to prepare them to fit into normal society rather than be apart from it. When these individuals are sent to a public day school, the transition from its special curriculum to a regular school with the usual curriculum can be made easily whereas transfer from a state residential school to a regular public school is rather unlikely.

The nursery school and kindergarten can provide a useful service for children who have a physical handicap which will require years of adjustment. These schools probably need not be special schools. By having blind, deaf, and crippled children attend the public nursery school and kindergarten in their home locality, the daily travel problem will be kept to a minimum. Through attending nursery school and kindergarten with normal children, the physically handicapped can learn at an early age the need for adjustment to life. The teacher of a nursery school or of a kindergarten attended by one or more physically handicapped children

should be shown how to deal with them so that a tendency to withdraw from life will be avoided. She should also be urged and shown how to teach these handicapped children to play games and to perform simple daily functions such as brushing teeth, combing hair, and tying shoe laces. This assistance to the nursery school and kindergarten teachers could be made available by the person in charge of the public day school for the physically handicapped. Placing such responsibility on that individual would tend to effect full use for the physically handicapped of all nursery schools and kindergartens in the city, and without curtailing their service to normal children.

When the boy or girl leaves kindergarten and enters the public day school for a city's physically handicapped, there will be need for a special curriculum. For children of elementary-school age who have a physical but no mental handicap, it need differ little in content from the usual elementary-school curriculum. Physically handicapped pupils require the tool skills which are taught in all elementary schools. Any child is at a disadvantage if he grows up without learning to read and write and to understand simple arithmetic.

Handicapped children of elementary-school age can be taught in heterogeneous groups. Boys and girls, blind, deaf, or crippled, all can be put in the same group if the group is small. It is preferable to put blind children in a group by themselves for a part of each day to form a Braille class until they have learned to read and write if there are at least several blind children of approximately the same age who need beginning instruction in reading and writing. The blind can scarcely be expected to progress rapidly in school until they learn to read and write in Braille. By learning Braille they can acquire much education, and pass their ideas to others in writing. Through the use of Braille they derive enjoyment and are able to receive written as well as oral instructions in school and, later on, in a job in any establishment using Braille.

In Braille the letters of the alphabet are recognized by touching combinations of raised dots. The Braille system of reading and writing has been developed in great detail and is usable in all parts of the English-speaking world. The raised dots are combined in cells two dots wide and three high, arranged in lines. Letters of the alphabet are printed in Braille from metal plates. They are written by hand with a mechanical Braille writer and also with a stylus and slate. The slate is a mental frame made of two leaves hinged together. With the use of the stylus and frame, dots are impressed on heavy paper inserted between the leaves.

Just as in the case of blind children, it is preferable to assemble the deaf in a group by themselves for a part of each day until they learn to read and write, if several of approximately the same age are in need of beginning instruction in reading and writing. In such daily sessions, the deaf should also be taught to read lips and observe facial expressions and movements of throat muscles in order to catch the meaning of conversations, the mute to converse in sign language by use of their hands, and other speech defectives to improve their pronunciation of words.

To a considerable extent blind children can be taught in the same way as normal children because of the use of the Braille system of printing, reading, and writing and use of globes and maps in relief, and ability to hear as well or even better than people who have no physical handicap. After the deaf learn to read and write, they too can be taught in a manner somewhat similar to students under a regular curriculum in public schools.

In the course of every school day, all children of a heterogeneous group who are of about the same age can be assembled for simultaneous instruction in identical subject matter. This procedure can build a kindred spirit and show each child that all, regardless of type of physical handicap, have certain common needs. Even though it may be difficult to imagine, the deaf will soon learn what is being said in these assembled sessions, especially if the teacher uses the blackboard, charts, and other visual media. The blind will hear the words which are spoken by the teacher and by the students who ask or answer questions, or comment on the subject at hand. The crippled will employ their senses of sight and hearing. The skillful teacher can adapt parts of the instruction so that all can use their sense of touch, smell, and taste to understand it.

Physiotherapy and recreation should each have an important part in the curriculum for physically handicapped children of elementary-school age. The physiotherapist can teach some crippled boys and girls to develop paralyzed muscles, and to walk or to improve their walking, with or without the use of walking devices, and to climb stairs.

A person skilled in teaching the blind should teach them to walk safely with the use of a suitable cane so that they can proceed with confidence about their homes, at school, and between home and school (and also to tell time with a Braille watch).

Various forms of recreation can be selected depending on the types of physical handicap represented in a group of children. The blind can learn to skate and many of them are skilled gymnasts. Finding or devising games that can be engaged in on a playground by children in wheelchairs so that frequently they can play outdoors in the sunshine is a challenging task when developing recreation phases of the curriculum.

Various forms of indoor recreation should be included in the schedule of activities. The blind can play skillfully such games as dominoes. Raised marks make each domino which they use identifiable by touch.

Singing is an item worthy of inclusion in the curriculum as it helps to build a happy atmosphere for the children. It can be enjoyed by a deaf mute who watches the joyous facial expressions of his blind and crippled classmates.

Any blind student showing interest in and aptitude for music should be given a considerable amount of instruction in this subject and any deaf stu-

dent showing fondness for art should be given much instruction in it, as the blind often have much musical talent and the deaf a facility in art.

Instruction concerning personal health should be included in the curriculum. It is desirable that the physically handicapped child acquire a common sense, rather than a hysterical, interest in his or her own health and learn how to improve personal health.

To what extent instruction in cooking, basket making, weaving, and the like should be included is a matter of opinion. It is the view of the present writer that physically handicapped children between the ages of six and thirteen, having approximately average intelligence and stability, should spend far more time acquiring competence in reading, spelling, writing, arithmetic, and in understanding life, than in working with wicker, yarn,

Upon reaching junior high-school age, and in some instances earlier, those individuals who have adjusted well to life and to book-study should enter junior high school and receive the same curriculum as do normal students. In borderline cases the preference of the boy or girl should probably be followed in choosing between special or regular curriculum at the age of twelve or thirteen years.

and the like.

For those who remain in the special group, vocational counseling, vocational training, and job placement will be particularly necessary. The curriculum for them should definitely include items of instruction which will prepare youth to leave school in six more years and hold a satisfactory payroll job or perform useful work at home. This group will need specific occupational training at the expense of general education, but not to the total exclusion of it. The blind boy who remains under the special curriculum and is trained thoroughly as a piano tuner or as a basket maker will receive less instruction in English, history, mathematics, and the like than the boy who is transferred to junior high school because of showing promise of becoming successful in a profession in spite of his blindness.

The boy (or girl) with average intelligence, remaining under the special curriculum, should be taught enough about some occupation so that he can begin earning his own way by the time he leaves school at approximately eighteen years of age. If a boy has a heart ailment, the job for which he is trained should be one in which heavy lifting is not required. The girl who has crippled legs or no legs at all but normal fingers can be taught to typewrite or to operate a sewing machine so as to fit herself for employment in an office or in a clothing or glove factory or in a tailorshop. A boy with similar handicap can be taught to clean and repair typewriters or sewing machines, or to clean and repair clocks or watches, or to repair radios or television sets, and the like.

Any curriculum items which will assist in making physically handicapped youth self-sufficient in a respectable way are worthy of inclusion. The girl who learns to operate a sewing machine or to typewrite can benefit from instruction in various phases of home economics. The boy who is

receiving intensive instruction in radio repairing should be given a small amount of instruction in cooking if he desires it. Ablity to prepare his own meals occasionally will be useful to him and may provide a sense of achievement.

Related trade subjects, such as mathematics, have a place in the special curriculum for the physically handicapped when they pertain very definitely to the occupation in which much instruction is being given. Those subjects which throw light on human relations and public affairs need not be neglected entirely when fitting a boy or girl between the ages of twelve and eighteen to become proficient in one or more productive skills.

In order to put the special curriculum into effect, certain architectural features are desirable. Ramps facilitate the movement of students in wheelchairs. Corridor space should be available for wheelchairs to be "parked" when those who can walk a few steps go into a classroom. Desks, chairs, and work benches used should meet the needs of each pupil enrolled. Lifting devices should be installed at and aside of the bench of a legless boy who is learning to clean and repair typewriters so that he can lift and turn with ease each machine on which he works.

When not practicable to send a physically handicapped child of more than seven years of age to the public day school for a period of months due to immobility, the school services can well go to the child. If he is confined to his home or to a hopsital, sanitarium, or convalescent home, suitable instruction can be provided through one or more visits per week by a teacher. For youth of junior or senior high-school age thus confined, the curriculum can be built to some extent around available workbooks and correspondence courses. The person in charge of the public day school for the physically handicapped would logically be the person to be made responsible for supplying visiting teachers to the shut-ins.

After the special curriculum for the day school is formulated and put into effect and special assistance is made available in nursery school and kindergarten and at bedsides, the community which is being served will benefit from information about the results. This information can be circulated by means of radio and television programs and by newspaper feature articles, illustrated with photographs of classroom and playground activities. It is possible for a large city to provide educational opportunity for the physically handicapped, with parents of many such children not being aware of the program, or at least not sufficiently aware as to cause them to enroll their children who may benefit.

One school which has been well-known for more than twenty years for its assistance to the physically handicapped is the Dowling School for Crippled Children in Minneapolis, Minnesota. It is supported by city and state funds. Located in a building on a wooded campus, it is specially equipped for instructing physically handicapped children. An elementaryschool curriculum is offered. In addition there is medical treatment and instruction in cooking, sewing, and woodworking. Today public schools

in some states are doing outstanding work for physically handicapped children, particularly in California, Illinois, Ohio, and New York. Los Angeles has special schools for children who are crippled with cerebral palsy.

When the physical handicap is not great at the age of five and six, the usual elementary-school curriculum is suitable and the child should attend school with a normal group. It is just as advantageous for him to do so as for an older handicapped child to transfer from the special curriculum to the regular as soon as it is believed he can progress reasonably well under the regular.

In the first grade a crippled child with a brilliant mind can benefit from associating with physically normal classmates and they can receive benefit from associating with him. In a usual type junior high-school class the blind boy or girl who has had special instruction for a few years before entering a class of normal students will read from Braille and then in conversation will tell what he or she has read. The mute will have come to the class only after learning to read, write, and do simple arithmetic with the aid of special instruction and will need to depend on writing in order to ask questions and convey his or her ideas to the teacher and to fellow students. The crippled child who has been recommended for the regular curriculum should be able to get along reasonably well when a suitable table or desk and seating arrangement is provided.

In the regular school the handicapped person who can profit from it learns much from class members who have no physical defect. In turn, normal students receive stimulation from these handicapped persons who set an example of perseverance. The accomplishments of the boy who is blind, speechless, or who has a twisted back may prompt others in the class to appreciate and to use wisely their ability to see and talk, and to move about with ease.

The physically handicapped boy and girl who progress through junior high school satisfactorily without a special curriculum should enter senior high school just as do others. Upon completing the usual senior high-school work and receiving a diploma, others ought not discourage them to enter college. Nor should the physically handicapped then be discouraged to acquire competence in a trade or other occupation for which it seems they have aptitude.

A child or youth whose only physical handicap is epilepsy can adapt himself or herself to the usual curriculum found in elementary and high schools and in college as well as can others of his or her amount of intelligence. If an epileptic has an I.Q. of approximately 65 or below and has frequent attacks, he no doubt should be admitted to a state institution for epileptics. If he has an I.Q. of 90 or above, he should be enrolled in school under the usual curriculum. Decisions concerning cases falling between these two examples should be decided individually after considering a number of relevant factors.

The school physician should determine how much the epileptic child who is enrolled in school knows about what can be done to decrease the number and severity of his attacks and how to administer medication. The physician can then correct for the child any important deficiency in such information.

Before the epileptic student leaves junior high school, the principal ought to tell him that epilepsy is not likely to bar him from college entrance nor from most of the professions, but that occupations involving the operation of machinery will be unsafe for him.

Systematic attention given to the problem of providing guidance and other educational opportunity for thousands of physically handicapped children and youth who are now neglected will not only bring happiness to many families. Over a period of years, it will also reduce the number of men and women who otherwise would be supported at public expense or by relatives. In the Washington, D. C. metropolitan area, there are an estimated 1,800 blind persons with only approximately 200 supporting themselves. Education of the blind, deaf, crippled, and others with serious physical defects increases to a small but noticeable extent the nation's productivity of goods and services. Furthermore, education of the physically handicapped reduces apprehension in the minds of those who fear that they or members of their family may be stricken. In short, the furnishing of appropriate educational opportunity for the physically handicapped accomplishes a mission of mercy in a spirit of democratic education and pays in dollars and cents.

THE LIBERAL ARTS CURRICULUM

The rapid development of specialization makes general education necessary so that individuals can acquire perspective among complexities. The liberal arts curriculum emphasizes general education rather than specialization. More than any other curriculum through the centuries, it has contained those items which are helpful in developing leadership of a broad type. The liberal arts curriculum takes into consideration the fact that students are human beings faced with a variety of problems. This curriculum makes available to the student the opportunity to understand human hopes, motives, and defects. It throws into the path of the student the comparatively small number of basic ideas which have been responsible for the progress of mankind. The liberal arts curriculum has a universality which is valuable and which, when appreciated and offered effectively, stands out on the horizon like the rock of Gibralter.

The function of colleges should be to develop leadership—either general, or in technical fields. The liberal arts curriculum is well adapted to develop broad leadership in public affairs, and in various fields, just as an engineering school is well adapted to develop leadership in engineering.

College graduates should have a philosophy of life, judgment, and an understanding of where the human race ought to be heading. They need

more than technology (technical training). They need general education as well. Colleges and universities should teach people to make discriminating choices, to see the over-all, the long-range view, and not just to know a great number of facts without seeing how they fit together in the large. The liberal arts curriculum is long on general education in contrast to technology and, therefore, teaches one about over-all matters of safety and happiness for humanity. The liberal arts curriculum is particularly well fitted to assist one in acquiring a liberal education for it provides a large view of life. This curriculum should place a heavy emphasis on teaching the student to choose between the shoddy and the good, the mediocre and the superior—in people, ideas, and actions. It should furnish students with a base for developing the ability to see things in many fields in relation to each other and to evaluate ideas and results.

The liberal arts curriculum in the United States typically requires four years of college study. This curriculum is found in the small liberal arts college, such as Haverford College in suburban Philadelphia, and in the undergraduate, general college of a university. Many of the liberal arts colleges which are not part of a university have an annual enrollment of approximately 500 to 1,500 students; some of these independent colleges are affiliated with Protestant denominations and some are controlled by the Roman Catholic Church. In the university, the school offering the liberal arts curriculum is known by terms such as the college, college of liberal arts, arts college, college of arts and sciences, and college of science, literature, and art. At the University of California, the college offering the liberal arts curriculum is known as the College of Arts and Sciences. This title covers much ground. Knowledge refers to acquaintance with facts or clear perception of them. Art consists of knowledge which is applied and made efficient through skill. Science is exact knowledge which is organized and classified, particularly in connection with the physical world. The term arts and sciences is, therefore, very inclusive and the liberal arts curriculum, which is a curriculum of arts and sciences, is also very inclusive. It deals in an over-all way with the entire field of knowledge.

The classification of institutions of higher learning in the United States and the determining of the total number of them offering a liberal arts curriculum is a difficult matter. A 1945 publication of the American Council on Education, compiled under the direction of Carter V. Good and entitled A Guide To Colleges, Universities, and Professional Schools in the United States lists 719 liberal arts colleges, listing by states in which located. In 1947 the President's Commission on Higher Education indicated that there were then 587 liberal arts colleges in the United States, (Page 16, Volume Three, Higher Education for American Democracy, published by Harper and Brothers). The Education Directory, 1954-55, Part 3, Higher Education, prepared by the United States Office of Education indicates there are 1,849 institutions of higher education in the forty-

eight states and the District of Columbia. On the basis of figures assembled from Table 3 (page 12) of the *Directory*, 1,396 of the 1849 have liberal arts curriculums. This figure, however, includes 516 institutions giving two but less than four years of work beyond the twelfth grade and probably includes some 4-year colleges in which the liberal arts curriculum is overshadowed and almost neglected.

Unlike law or medical curriculums, the liberal arts curriculum follows on the heels of high-school graduation. In both the independent liberal arts college and in the liberal arts college which is part of a university, the subjects included in the liberal arts curriculum are offered by a number of departments, such as the mathematics department, the history department, and the English department. Instrucion in non-professional areas is given so as to provide a liberal education rather than specific training for a profession or other vocation. The liberal arts curriculum is not primarily vocational, as is an agricultural, engineering, or architectural curriculum. For the one who becomes a specialist after being graduated from a liberal arts college, the four years of undergraduate study should prevent specialization from becoming narrow. The liberal arts curriculum is concerned with providing a broad foundation of knowledge. It should teach students to think objectively in many fields, to establish a system of values, to express their ideas, and to take actions which will result in betterment of the human scene. These results however, are not to be expected only of persons who have been graduated from a first-rate liberal arts college. Many specialists who went from high school to a professional school, such as a college of engineering, have acquired the ability to think profoundly on many important problems not related closely to engineering, and have made contributions lying beyond their field of specialization.

For the most part, American colleges and universities now do more to train for specialization than to educate for broad leadership. Many liberal arts colleges have been lured into the lush meadows of training and offer much instruction in business administration and in the techniques of public school teaching and public school administration. Numerous liberal arts colleges have also sought eagerly to cater to pre-medical students and cram them with a considerable number of courses in biology, the completion of which assists one to enter medical school.

There has been much concern in the United States during the last twenty years about the small amount of general education provided by the curriculum of the liberal arts college and by the curriculums of undergraduate professional schools conducted by colleges and universities. The University of Chicago, Harvard, Yale, Columbia, and the University of Michigan have each done something about this concern. In an effort to outline a liberal arts curriculum of much worth to the student and to the nation, 27 pages (204-230) of the Harvard Report (General Education in a Free Society, 1945) were devoted to proposed courses for Harvard's "College."

The liberal arts colleges which have not decreased the breadth of their curriculum for the individual student by pyramiding course upon course in a few particular subject matter fields have sacrificed a large number of potential enrollments. Nevertheless, the liberal arts curriculum can still be found in unadulterated form and has as its objective, education for leadership of a broad type.

A number of college and university catalogues carry glowing but rather vague statements concerning their liberal arts curriculum. In its catalogue for the year 1955, the State University of Iowa makes the following interesting and helpful statement about its College of Liberal Arts. Although not very specific, the statement indicates in large strokes the ideal purpose and the ideal nature of the liberal arts curriculum in the United States.

The primary function of the College of Liberal Arts is to provide a liberal education—to encourage the student in the fullest possible development of his capacities as a person and a member of society. The fundamental goal is the well-rounded development of the individual intellectually, spiritually, physically, emotionally, and aesthetically. To this end the College assists the student to acquire ability in reading, writing, and speaking, in counting and calculating, in securing and maintaining physical fitness; it guides him toward a mastery of the leading ideas, significant facts, and methods of work in such fields as the sciences, social studies, language and literature, fine arts, history, and philosophy; it aids him in the development of a resourceful and independent mind, the ability to use as well as to accumulate knowledge and to recognize his mental strengths and weaknesses; finally, it attempts to provide him with experiences which will be conducive to the development of strength of character and a sense of personal responsibility. (Page 47).

In short, the liberal arts curriculum emphasizes the acquiring of a liberal (broad) education. It emphasizes general education, everyday principles of life, so as to develop within the student a comprehensive view

and understanding of human problems.

Like many other concepts of long standing, the liberal arts curriculum has changed over the years. In ancient times a liberal education was one which was considered appropriate for a freeman, in contrast with education regarded appropriate for a slave. A liberal education was based rather largely on what developed into the seven liberal arts of medieval times—grammar, logic, rhetoric, geometry, arithmetic, music, and astronomy. In the ancient world a liberal education was looked upon as an education for leisure rather than one which prepared a person specifically to earn a living.

Among the Romans the branches of higher learning were known as the artes liberales (liberal arts) as these studies were looked upon as arts suited to freemen. In medieval times the seven branches of learning upon which Plato had focused attention were recognized as liberal arts and were divided into two groups. In the medieval curriculum leading to the Bachelor of Arts degree, grammar, logic (dialectic), and rhetoric were included and were called the *trivium*, a Latin word meaning three ways or three roads. The curriculum for the student who wished to obtain the

Master of Arts degree included the remaining four branches—geometry, arithmetic, music, and astronomy. They were known as the *quadrivium*, a Latin word meaning four ways or four roads. Each of these seven subjects in the medieval curriculum was regarded as disciplines of the mind.

In the 500 or 600 years intervening between the days of the medieval curriculum and the present, the natural sciences in general and then the social sciences were added gradually to the liberal arts curriculum and each of the seven medieval liberal arts was made available to the candidate for a bachelor's degree. During these five or six centuries, the *trivium* developed into that part of the liberal arts curriculum which now leads to the Bachelor of Arts degree and the *quadrivium* into that part leading to the Bachelor of Science.

To teach youth to think intelligently about many phases of life is a primary purpose of the liberal arts college. It should also provide its students with extensive knowledge about one field of considerable breadth—biology rather than zoology, history rather than American history, and the like. The liberal arts curriculum, to be worth its salt, should, like any other curriculum—especially beyond the high-school level—teach a student to educate himself. In order to do this an excellent faculty is necessary, a faculty which gives attention to students and knows how to stimulate a thirst for knowledge and guide it appropriately so that self-education of a proper type will germinate.

A liberal education has been advocated in various countries during different centuries, but seldom has it been defined in a manner which we might consider to be adequate. This fact is pointed out clearly by Thomas Woody in his book entitled *Liberal Education for Free Men*, published by the University of Pennsylvania Press in 1951.

There is no more important problem in curriculum development for higher education in the United States than this one of liberal education versus specialization during the four years of college. The conflict between liberal education and technical training has become acute during the last century because of the rapid progress of science and technology. The liberal arts college has been caught in this conflict and to a large extent has attempted to straddle it.

A liberal education should acquaint the student with scientific method to such extent that he can judge fairly well whether or not others are using the method properly. He should be able to read and understand scientific articles even though he does not become a scientist or a writer. He should know how science and humanism fit together, and not regard them as being diametrically opposed to each other. From a study of the humanities, he should acquire a knowledge of man's potentialities and an awareness of the pitfalls which can ensnare anyone in thought and in action.

General education and liberal education are very much alike. Liberal education was formerly looked upon as something aristocratic. General

education puts liberal education to work in such a way that men and women acquiring it learn how to live useful lives in their community and at the same time how to live a life that is satisfying to themselves. A person who has had either a liberal or a general education resulting from the pursuit of the liberal arts curriculum to satisfactory completion should think objectively and constructively, understand science, enjoy literature, art, and music, and participate as an informed citizen in the solving of community problems.

The liberal arts curriculum should not have a "corner" on general education at the college and university level. Technical training in undergraduate professional schools, such as schools of journalism and engineering, should be accompanied by general education. This blending in undergraduate professional schools is necessary in order for graduates to attain breadth to achieve recognition in their professions and, as citizens, to

perform useful service of varied types.

The liberal arts curriculum acquaints the student with the main social and political problems, makes him realize the nature and place of science in our civilization, and causes him to know that magnanimous action gives meaning and value to human life. The liberal arts curriculum in many senses provides a minimum of educational equipment which a person needs in order to live intelligently in the present world. Millions of people in America probably receive this equivalent in a way more arduous than spending four years on a college campus under the liberal arts curriculum. They receive the equivalent by reading, meeting people, and acquiring a variety of significant experiences.

The trend of enlarging the number of general education courses in undergraduate professional schools will assist engineers, architects, and the like to enlarge their horizons. Even so, general education is largely crowded out of the undergraduate professional schools because of the necessity to provide the student with many technical facts and skills which he will need immediately upon entering his profession.

Especially should those who intend to continue their formal schooling beyond four years of college devote their undergraduate work to general but intensive education, in order to acquire breadth of understanding. Medical schools have gone far in the last twenty years in requiring technical training as a requisite of admission. A few subjects formerly taught in medical school are now loaded on the pre-medical student while he is enrolled in a liberal arts college. It is believed by this writer that, even in a day of endless scientific development, the medical student will be a better physician (or surgeon) and citizen as a result of pursuing a liberal arts curriculum which is just that, rather than a pre-medical curriculum bristling with technical courses. In the same way the law student, the physicist who desires to strive for a Doctor of Philosophy degree, and the student of education who desires to strive for a Doctor of Education degree, will be more useful than otherwise in their respective professions and in

public affairs if a considerable part of their four years of college is devoted to general education of a high type, rather than to pre-specialization.

A stimulating article by J. Orin Oliphant, entitled "The Meaning of Liberal Education" is found in Volume II, Number 4, Bucknell University Studies, published in April 1951. The following quotation from the article assists in showing what liberal education consists of.

The only education that I can conceive of as liberal is one which acts to set the mind of man free; one which, in the process of its fulfillment, leads man onward and upward to newer and nobler freedoms; one which ultimately puts man in the state of understanding, a condition of being which is of the essence of the good life. Because it is concerned with the mind of man, liberal education is perforce of the mind and of the spirit; . . . The mind of man should be emancipated from ignorance; for ignorance fosters such unlovely traits as provincialism, fear, selfishness, intellectual and moral dependence, and, in general, indifference to truth, goodness, and beauty. By common consent we say that a man who exemplifies such traits is not a liberal man; he neither devises liberal things, nor by liberal things does he stand. On the contrary, by common consent, we say that a man is liberal who loves truth for its own sake, and who will make sacrifices that truth may prevail; who is broadly tolerant of the shortcomings of his fellowmen and pleasingly urbane in his intercourse with them; who loves beauty, whether it be of thought or of things; who has rational convictions as to goodness and the courage to defend such convictions though the world be against him. Such a person is a fit product of liberal education. Such a person we expect to devise liberal things and to stand by them. Such a person has become emancipated; he has become free to choose truth, goodness, and beauty; for truth, goodness, and beauty have come within his ken, and he has seen that these are riches greatly to be desired. If he knew not of them, he would be neither free nor willing to choose them. (Pages 168-170).

The University of Chicago established its "College" in 1931 to develop a model liberal arts curriculum which would perform the University's function of providing general education of collegiate caliber. A book entitled *The Idea and Practice of General Education* describes the College of the University of Chicago. This book was written by persons who had been on the faculty of the College between 1931 and 1950 and was published in 1950 by the University of Chicago Press. The first chapter of the book opens with the following provocative words:

The history of American education illustrates, among many other things, that pre-occupation with the practical may, in the long run, be dangerously impractical. One of our basic needs as a nation is a generally educated citizenry, for the success of our democracy depends ultimately upon the wisdom of our people. Yet this crucial need for general education, that is, for the kind of education that will prepare men to deal with the problems which confront all members of a democratic society, has been largely overlooked at the higher levels of education in this country because of our concern with more restricted needs, especially our interest in developing competence for occupations and professions.

The October 1950 issue of Association of American Colleges Bulletin includes an article by R. C. Simonini, Jr., entitled "An Ideal for Liberal Arts Education." In the article the question is raised: "What instrument

of our complex educational system today is to develop a breadth and depth of learning, a sense of self-reliance, a faculty of vision and imagination—qualities so essential to leadership—if it is not the liberal arts college?"

(Page 430).

The liberal arts curriculum varies today between liberal arts colleges, as can be seen by scanning college catalogues. In general it requires, as a means of securing a liberal education, that freshmen and sophomores acquire knowledge in many phases of human experience through taking a variety of courses. By this variety they can find the areas in which they have ability and which interest them, some of which they have studied in high school, and some which are new to them.

Contrary to the spirit of the liberal arts curriculum, a large number of college students following this curriculum now devote much time to specialization. They take a large number of courses in the science of teaching so as to meet or even exceed state requirements to teach in public high schools, or take quite a number of courses in a major field, as for instance business administration or chemistry, in order to meet entrance qualifications in various fields of work. To this extent the modern liberal arts curriculum is a combination of broad cultural education and technical training.

Volume One of the report of the President's Commission on Higher Education, previously referred to, makes the following significant statements concerning specialization *versus* general education.

Present college programs are not contributing adequately to the quality of students' adult lives either as workers or as citizens. This is true in large part because the unity of liberal education has been splintered by over-specialization. (Page 47).

When the liberal arts college allows its students to specialize in one field of study so early and so intensively that other areas of knowledge are ignored or barely touched upon, it gives up its liberal birthright and becomes in fact a professional school. (Page 72).

The practice of permitting exceptionally good students in liberal arts colleges to be graduated in three and a half or in three years may have merit. This writer, however, believes that since maturing of the mind requires a considerable amount of time the exceptional student can profit substantially by spending four years under a curriculum which is worth as much as three years of his time. The four years can readily be made intensive for him.

This writer suggests that the equivalent of three of the four years of study by a person enrolled in a liberal arts college be devoted to broad education and that the equivalent of one year be devoted to concentration in a major field, but not in specialization in that field. Again, the student majoring in history should concentrate in that field by taking a number of courses such as ancient, medieval, modérn, European, Oriental, and American history rather than specialize in any one segment of history. By concentrating rather than specializing the student will secure a broad

base in the field of history (if that is his major field) on which to build a specialization in history after leaving college. Specialization in college accompanied by building a broad base after graduation is about as unlikely as building a strong foundation some day under a house which one may now construct on posts. It is probable that the disadvantages of a narrow base resulting from early specialization will never be overcome. The early specialization will defeat the purpose of the liberal arts curriculum. The years following college will provide ample time to specialize. Furthermore, many students leave college after four years of successful study with the idea of specializing in one segment of their major field and five years later find themselves specializing in another segment of that field, or perhaps find themselves in a different field. Concentration rather than specialization is particularly advantageous in the former instance.

It is very difficult to produce a versatile person today who is more than a jack-of-all-trades and master of none. Yet, if the student has been provided with a broad, thorough, and effectively presented four-year liberal arts curriculum and has made considerable use of it during the four years spent in college, he will be prepared to see life in the over-all. He will be well fitted to begin on a career of specialization which will be richer than mere specialization which started at the tender age of eighteen or twenty.

When the student's major field is pointed toward employment which has licensing requirements, such as public school teaching, the time reserved for concentration can be divided almost equally between concentrating in the major field and the study of courses which prepare one to meet the licensing requirements. Such a 3-1 or 3-1/2-1/2 arrangement in dividing the four years spent in a liberal arts college will avoid loading the curriculum with technical training at the expense of broad education, and yet provide sufficient training to qualify for entrance in a worthy field of work upon graduation from college. Summer courses in education or in secretarial work, and laboratory techniques acquired through temporary employment in a factory, can be used to avoid spending too great a part of the four years of college on technical training. With the equivalent of three years being devoted to broad education, the liberal arts curriculum will avoid making of the student a specialist by time of graduation from college and will serve him well after he becomes a specialist.

Liberal studies are those which are foundation stones, those which a well-educated person cannot afford to be without. Liberal studies deal with universal knowledge rather than with matters which are important today and may be of little value tomorrow or which are of only local interest. There is need of much more precise thinking in setting forth the liberal arts curriculum than has usually been the case during the last thirty years. It is desirable to include relatively few subjects in the liberal arts curriculum and teach them well. Those few subjects, like those constituting the medieval liberal arts curriculum, ought to be extremely broad. When taught in a stimulating manner to selected students such a curric-

ulum will produce thinkers and philosophers, a desirable result of liberal education.

A liberal arts curriculum should include literature, history, science, and mathematics. These subjects, and a few others, are fundamental in producing persons who can deal with a large range of personal and public problems. In order to provide a balanced curriculum for the liberal arts student which will give him a broad vista of life, five large subject matter areas are recommended, as follows:

- The humanities (literature, history, philosophy, religion, fine arts, and music)
- Languages (English, French, German, and Spanish, with some consideration given to Russian, Chinese, and Japanese)
- 3. Social sciences (economics, government, sociology, and psychology)
- 4. Natural sciences (biology, chemistry, and physics)
- 5. Mathematics.

These five subject matter areas, the humanities, languages, social sciences, natural sciences, and mathematics, are each important. They have the potentiality of exposing the mind to the large problems of life—man's struggle with himself, with his fellowmen, and with nature. The five areas are sufficiently comprehensive to acquaint the student with centuries of human experience and with the greatest men, women, events, and thoughts of all time. Hence, a curriculum based on these five subject matter areas has the possibility of indicating to the student, solutions to many problems of life of the type which are constant in the world.

In order that the liberal arts curriculum will provide the student with a liberal education, instruction in each of the five areas must be broad and meaningful. Instruction of a cramped, artificial, and memorizing type

will tend to shackle the mind rather than enlarge it.

Instruction in the humanities should be conducted in such a way that it will show man in relation to himself as an individual and assist the student to live with himself. It should assist him in building a personal philosophy of life. The humanities should be taught as concepts which will stimulate thinking. Literature, an important part of the humanities, quickly loses its real value as a humanistic study when conjugation or etymology are emphasized. Studying literature for the grammer and forgetting the spirit and meaning does not liberalize. History, another segment of the humanities, can be taught in a very provincial way, or in a way which causes the student to think broadly and deeply.

Only those parts of the humanities which are effective in humanizing should be emphasized in the liberal arts curriculum. Not all literature is of equal value in explaining human problems, just as not all scientific data are of equal value in teaching one to be research-minded. Languages should be taught in such way as to develop the power to express ideas clearly and forcefully when speaking or writing, and to understand and appreciate the culture of the people whose languages are being studied.

Instruction in the social sciences should be provided in a manner which will show man in relation to society and assist the student to live with others. As advance in the natural sciences and mathematics is made which brings with it exceedingly rapid, world-wide transportation, atomic energy, and the like, there must be understanding of complex social, economic, and political results of these advances. Totalitarian rulers put to naught or garble the social sciences. Therefore, in a democracy there is much need for curriculum emphasis on the social sciences, particularly in the liberal arts college.

Instruction in the natural sciences and mathematics ought to be given in such a way that it will show man in relation to the natural and physical world. The study of the natural sciences and mathematics should convince the student that man can continue conquering nature with remarkable swiftness if he determines to do so. It should also make him eager to search for truth and show him how to do so. If one becomes an efficient technician in a laboratory as the result of studying biology, chemistry, or physics but is narrow in his viewpoints and not conscious of the scientific method of discovering truth, then his study of the natural sciences has not been liberalizing.

World perspective should be one of the main points of emphasis in the liberal arts curriculum. The American student needs to be brought in thoughtful contact with eastern civilization and should attempt to learn why Orientals look upon themselves as cultured. He should try to understand the feelings of the Oriental and should become aware of the fact that the East is having a tremendous part in world affairs. He should also make an attempt to study objectively the Russian people and their government. This he can do under a curriculum which emphasizes world perspective. The President's Commission on Higher Education, twice referred to above, put the matter this way:

In the past the liberal arts college has stressed the history, arts, and institutions of Western culture, without giving much time or attention to the kinds of civilization that exist in other parts of the globe. In the new world it is not enough to know and understand our own heritage. Modern man needs to sense the sweep of world history in order to see his own civilization in the context of other cultures. (Volume 1, page 17).

Pursuit of the five subject matter areas suggested in these pages soon carries one to the greatest writings of all times. By reading choice selections from the works of Aristotle and Plato, from the Bible, from the works of Virgil, Dante, Shakespeare, Milton, Emerson, de Tocqueville, Darwin, and Tolstoy, one gets at gems of wisdom. To look for and find challenging ideas in the greatest writings and to mull over those ideas is an educating process. In order to avoid encumbering the student with more than he can assimilate, instruction provided under the liberal arts curriculum should direct attention to only a relatively small number of choice writings, but they should represent a wide variety among the five subject matter areas. Reading in private should be followed by class discussion which causes the

student to think and to express his ideas about the respective gems which are assigned to him for careful reading.

Through familiarity with the ideas of great men and women, the student gains a fund of knowledge that can be useful to him for the remainder of his life in handling problems of job, family, and community affairs. The reading and analyzing in five subject matter fields, in which the courses range from literature and history to physics and algebra, should develop the habit of reading widely throughout life. Persons who read widely and are able to do so intelligently are not restricted by their environment. They can look beyond their fields of work and their communities and can appreciate the fine things of life as portrayed in literature, history, philosophy, art, and music and can feel at home in the world of science.

People who have had little contact with the humanities, languages, social sciences, natural sciences, and mathematics and who lack a liberal education fail to realize that preceding generations as well as their own made many contributions to human progress and solved successfully problems of the type which are being faced today. The liberal arts curriculum teaches tolerance and encourages a searching for a solution rather than a tendency to give up in the face of a problem or a tendency to accept a hasty conclusion concerning it. The humanities, languages, social sciences, natural sciences, and mathematics each help in this process of developing the mind and in freeing it from prejudice.

These five subject matter areas have the content which is necessary to put spirit into education and develop a zest to improve man's lot on earth. Education based on these five subject matter areas can and should be liberal. Students following a curriculum based on these five will be brought in contact with a cross section of the world's wisdom. Under the guidance of liberally educated professors who have in large measure the ability and the desire to teach, the student will be made aware of major problems and dominant trends in current civilization. One secures a liberal education indeed by analyzing and assimilating a comparatively small number of the choicest writings which have been produced from the beginning of time, by becoming acquainted with scientific method and mathematical preciseness, by becoming aware of a variety of human problems falling within the social sciences, and, through the study of languages, by enlarging the ability to express ideas and, in the instance of foreign language, by learning about people other than residents of the United States.

In the use of the above outlined five-area liberal arts curriculum, the student should be instructed by persons who have a broad view of life and who teach people to think broadly and deeply. The professor of literature whose life revolves almost completely around Greek mythology of the Homeric Age and the professor of chemistry who is interested in little else than discovering ways of increasing the effectiveness of pepsin in converting undigested protein food substances into assimilable amino acids

should have no place in a liberal arts college, except, perhaps, as visiting lecturers. Faculty members in a liberal arts college need to be versed in the liberal arts themselves rather than merely to constitute a collection of specialists. Any professor in a liberal arts college should present subject matter in a setting which is large enough to indicate its relation to other subject matter fields.

The liberal arts student should be taught to express his or her ideas well in writing and orally. A high type of counseling of a kind which is both intellectual and friendly should be made available. Testing should be done mainly by other means than asking factual questions based on textbook assignments. The testing should provoke thinking and should measure ability to think.

Most persons who attend college in the United States are enrolled in courses and receive instruction in groups in the various courses in which they are enrolled. Tutorial instruction is individual instruction and is used to a small extent in liberal arts colleges. It is combined with the course system. Tutorial instruction customarily is thought of only in connection with students who have marked intellectual capacity to do independent work. Tutorial instruction can mean that the student in his junior and senior years will concentrate on a few subjects and in a rather independent way instead of on a classroom basis. The student meets his tutors occasionally, perhaps once each week, in private and in seminars.

It seems to this writer that the tutorial system of instruction is excellent in theory but is more likely to function poorly than well. The tutorial system is in sharp contrast to the course system and is much like the form of graduate work which leads to the Masters and to the Doctor of Philosophy degrees. The tutorial system emphasizes student responsibility and learning rather than teaching. In practice it provides relatively little contact between the student and his teachers, but it can be informal and personal. Most undergraduates are too immature, however, to depart very far from the course system, even in their senior year. Many college students in the United States are not capable of profiting as much from the tutorial system as would be desired. Professors are likely to have insufficient time to deal with students individually or are likely to shortcut tutorial duties except for a very few students who they believe have extensive potentiality. Poor instruction, ineffective guidance, and time grudgingly given show up plainly to the student being tutored. He quickly realizes that he is on the losing end. Furthermore, under the tutorial system of instruction, the professor loses the stimulation resulting from the dramatizing of subject matter with forcefulness for a group and from leading a classroom discussion. Even when trying to guide a very receptive student, the professor's spark of inspiration may soon die down. The power of numbers is significant for the type of personality possessed by many teachers.

Determining which students benefit greatly from tutorial instruction and which do not is difficult. Nor is the selection of subjects adapted for tutorial instruction an easy task. The humanities and the social sciences appear to be more adaptable than the natural sciences since in the former the student must learn to judge and to defend his decision whereas in the latter (natural sciences) unalterable laws and precise facts are sought. Regardless of subjects selected, the finding or developing of persons who can and will tutor well is an important matter.

T

e

n

18

e

11

d

1-

rs

nt

al

m

d

le

ıd

ts

al

10

es

y.

p

ne

ct

15-

r's

if-

m

or

Instructing one student at a time under the tutorial system in contrast to instrucing twenty-five or even 125 students simultaneously under the course system presents serious administrative and financial problems. Tutorial instruction is very expensive. To offer high-quality course instruction and a really good tutorial system at the same time is too expensive for almost any liberal arts college in the United States. Nevertheless, when both the governing body and the executive head of a liberal arts college determine to use the tutorial system and to handle it well, they should be encouraged to put it into operation. If the tutorial system is used, it should be made available as a feature that must be earned. It probably should be reserved for seniors, those seniors who have a thirst for knowledge, who search for ideas and then evaluate them, and who press on and on in the quest for truth-in other words, the type of student found in graduate school. Certainly, under current admission standards of liberal arts colleges in the United States, most freshmen and sophomores should be instructed by the course system rather than by a tutorial system based on independent study. Even though a few under-classmen can benefit from the tutorial, they can be immersed in course instruction without harm if they are given a reasonable amount of sound guidance in a helpful way and if they are stimulated to take full advantage of the course system.

Regardless of whether the course system, the tutorial system, or a combination of the two are used in order to put the liberal arts curriculum into operation, a smattering of knowledge, or even a considerable accumulation in each of the five large subject matter areas listed above, is not enough. These areas should be tied together to some extent rather than be offered as tight and almost mutually exclusive units, as is often the case under any curriculum in college. History and science can be taught in such way as to isolate them from each other in the student's mind, or to relate them to each other. Unless the liberal arts curriculum operates so as to tie its subjects together in the student's mind, it fails to produce a liberal education.

Tying together the five large subject matter areas—the humanities, languages, social sciences, natural sciences, and mathematics—is an intricate process which presents a problem. Perhaps there is no current solution to this problem. However, the integration of subject matter areas can be attempted in a number of ways in the liberal arts college. The first step will be to teach students to think in terms of two or more subject matter areas at one time. This writer has no answer to the integration

problem that is completely satisfactory to himself, but, he believes that the following ideas can be used to achieve the integration to some extent.

In regular classes questions can be raised, the answers to which are frequently taken for granted, such as "Should a law student be required to pass a bar examination before being permitted to practice law?" Drawing students out as to why a bar examination should be required can generate a considerable amount of thinking in a class. Questions which deal with two or more of the five subject matter areas can cause a type of thinking which begins to link those areas, as for instance: "How have trends in history influenced science, and how have scientific developments affected history?" "To what extent do Charles Darwin's theories influence the natural sciences, and the social sciences, today?" Study and discussion of selected and annotated readings assist the student to integrate two or more of the subject matter areas. Discussion of such selections as the American Declaration of Independence and Edmund Burke's "The Speech for Conciliation with the Colonies" offers excellent opportunity to draw together for a group of students history, literature, and political theory into a meaningful and broad segment of learning.

Subject matter integration in the liberal arts college can be accomplished in part by group discussion activities beyond regular classes. Such group discussions probably should be scheduled to meet on a periodic basis, with faculty members from different departments and junior and senior students all joining together. In order to have a workable sized discussion group, an attendance of three or four professors and fifteen to twenty students would be desirable. The discussions could be somewhat informal but very much to the point, and held at a high level of scholarship and thought. Broad topics could be discussed which cut across the humanities, the social and the natural sciences, and, also perhaps, mathematics.

The regularly scheduled seminar, too, can be used to tie the subject matter areas together. At one session a student can present a paper lying within the humanities. At a second session another student can present a paper dealing with the natural sciences, and at a third session another member of the group can treat a phase of the social sciences. Each paper should be selected with a view to having implications in the three subject areas, and all who attend the respective sessions should be encouraged to discuss each paper presented.

As they are available, psychiatrists, psychologists, physicists, and other "specialists" who have a liberal education should assist in teaching the relatively few subjects in the liberal arts curriculum. Integration of subject matter can be achieved by bringing to an economics class a visiting industrial psychologist for an hour to show how business corporations profit from psychological testing. In the same way a visiting psychiatrist who has made studies of genius can captivate the attention and enlarge the understanding of members of a European history class by discussing with them for an hour the intelligence and the psychiatric personal problems of some

of Europe's historic crowned heads. Such use of liberally educated specialists will help to broaden and integrate the subjects in the liberal arts curriculum and make pursuit of the curriculum an adventure in fundamental learning, in the acquiring of universal knowledge.

Cramming in order to pass a semester examination, or even intensive and systematic study with the purpose of obtaining a high grade in a course in which enrolled, tends to make a student look upon the curriculum as a group of independent courses to be passed rather than an integrated four-year program of study. The conducting of comprehensive oral and written examinations at the end of the fourth year, or at the end of each year, can be a means of tying the curriculum into a unit for the student. In conducting the oral part of the comprehensive examination, three or four faculty members could sit as a group with the student for a half hour and toss problems to him, each relating to more than one course studied during the year, or the four years. Even though time-consuming for faculty members, their presence in a group at annual oral examinations would do much to make the student see more than one side of a problem and to integrate subject matter for himself. Similarly, in the written part of the comprehensive examinations, questions could be selected each of which call for reasoning based on use of facts gained in more than one subject matter field.

n

al.

ct

a

n-

ld

15,

188

er

he

b-

n-

fit

as

er-

m

ne

During four years spent in college even the best student can assimilate only a small fraction of the total offerings listed in the catalogue of a large university. No school can convey all knowledge, techniques, and wisdom to one student in four years, nor in forty-four. Those who control an institution of higher learning must decide whether or not it will provide the liberal arts curriculum. If it is decided that a school shall offer such a curriculum, and approximately 600 institutions of higher education in the United States do, then it must also be decided whether the program is to be a liberal arts curriculum in fact or a hybrid almost equally composed of general education and technical training, or more heavily weighted with technical training than with general education.

In planning to enter college a prospective enrollee must decide, unless drifting into college, whether he wants to devote the four years to a curriculum which consists mainly of broad education or to a curriculum consisting largely of technical training. There is much sentiment in favor of the liberal arts curriculum today, apparently much more than in the 1920's. It appears that the liberal arts curriculum will remain and that it probably will be less diluted during the next thirty years than it has been during the last thirty.

From the standpoint of its potentiality of developing in students vision and the basis necessary to form true values, the liberal arts curriculum is the best curriculum fashioned up to this time. In much of its present form it has stood the test of several generations and a rapidly changing social, economic, and political order. The person who is worthy of the diploma

which is awarded on completion of four years of work in a liberal arts college will almost certainly find his or her way in life. Nevertheless, it must be recognized that, in being long on cultural background, the liberal arts curriculum is short on preparation for employment unless one plans to teach or to enter the service of an organization which hires young men and women with a general education.

In order to meet the objection that the liberal arts curriculum does comparatively little to prepare a student to secure a job, individualized assistance can be given to bridge the gap between college and career. This assistance can be given in a five-year period beginning during the student's last year in the liberal arts college. It can be given mainly on a professor-protégé basis. The assistance can be of the following types.

- 1. Help the student obtain a beginning job in his major field, such as jobs in a business firm for the business administration major, or in a chemistry laboratory for the chemistry major, where there are on-the-job training opportunities and reasonably good possibilities for a capable person to advance.
- 2. Help him (or her) secure an internship, in or out of government, in a field of activity which does not clash with his interests and abilities. The internship will assist him in choosing a career. If he finds the internship attractive, it will solve his immediate employment problem and can be a means of securing exceptionally desirable employment within three to five years.
- 3. Help prospective teachers secure employment in the kind of school and under a type of person suited to the desires and temperament of the prospective teacher. Some liberal arts graduates will be happy when teaching in high school, others will do far better in a private preparatory school or in college. In secondary or in college teaching, one person will develop rapidly under a particular individual holding the position of principal or department head whereas another will stagnate. This is due to a combination of personalities represented by principal and department head on the one hand and differences in the personality of the prospective teacher on the other. The wise professor in a liberal arts college is aware of these conditions. To some extent, depending on his prestige and the workings of the law of supply and demand in any given year, he can find appropriate teaching positions for his students who have much potential teaching ability. He has the opportunity to do a great deal to help appropriate students to obtain a good start in the teaching profession.
- 4. Help selected students to secure further schooling. Those who seem to be well fitted for law, medicine, dentistry, or for graduate work leading to a Masters Degree should be encouraged to continue formal study. One's major professor can be of great assistance in selecting a professional or graduate school and in obtaining financial assistance, such as a fellowship entirely for study purposes, or a part-time teaching position.

The fact that the liberal arts curriculum is short on preparation for a specific job presents a real problem for persons who enter the liberal arts college and do not belong there. If the student lacks imagination and leadership, is graduated in spite of these deficiencies, and never goes on to a professional school to secure specific training, he may have difficulty in securing employment that he is likely to consider satisfactory, even if given much individual assistance as to job placement. Especially is this true when the student is graduated in a period of economic depression. The liberal arts graduate with both imagination and leadership, however, will soon advance under most employment conditions even though he never goes on to a professional school to secure specific training.

There need be no quarrel between the liberal arts curriculum and technology. Both the liberal arts college and the professional school are necessary. Some students of college caliber are better suited to the one than to the other. The instruction provided by both the liberal arts college and by the professional school is essential to world progress. To those who doubt the practicality of the liberal arts curriculum but one question need be put, "Is there anything more practical than providing the means for selected students to build a broad foundation for life?"

The liberal arts college is much respected in America. Those liberal arts colleges which enable their students to secure a broad education continue to serve a useful function. They form a distinctive unit in the nation's educational system and to a considerable extent are a source of ideas for curriculum development for professional schools.

EXTENT OF COLLEGE AND UNIVERSITY OFFERINGS TODAY

A quick picture of college and university offerings in America in the 1880's can be visualized by scanning a 37-page pamphlet entitled University Degrees. What They Mean, What They Indicate, and How To Use Them. This pamphlet, written by Flavel S. Thomas, was published at Syracuse, New York, in 1887. It lists 62 degrees conferred. When eliminating duplications resulting from such listings as A. M. and M. A. for Master of Arts, 38 degrees remained, all but two being earned degrees. The pamphlet describes the requirements for the respective degrees. As to the A. B. (Bachelor of Arts) it states "This degree certifies that the holder has devoted about three years to a preliminary course of study, and four years to a college course; both courses consisting almost entirely of Latin, Greek, and Mathematics." (Pages 10-11). Among the degrees listed by Thomas are the following: Bachelor of Agriculture, Bachelor of Mechanic Arts, Bachelor of Architecture, Bachelor of Civil Engineering, Bachelor of Mining Engineering, Bachelor of Mechanical Engineering, Bachelor of Veterinary Surgery, Doctor of Dental Surgery, Bachelor of Literature, Doctor of Medicine, Bachelor of Music, Doctor of Philosophy, and Graduate in Pharmacy.

n

A later work by Thomas, published in 1898 and entitled A Dictionary of University Degrees, shows a changing picture. As to the Bachelor of Arts degree, Thomas now says (on page 21) that the course leading to it "has usually been four years long. These four years have, for many years, been devoted almost entirely to the study of Latin, Greek, and Mathematics. But now our best universities allow students to elect their studies." With the introduction of the elective system and the growth of college enrollment, the curriculum of colleges and universities grew tremendously. During the first thirty years of the present century the number of courses at Harvard rose from 543 to 1,115. At the University of Chicago from 1903-04 to 1928-29 there was an increase of 115 per cent in number of courses offered. During that time in the University's professional schools, except Rush Medical College, there was an increase of 389 per cent in courses according to Reeves, Miller, and Russell in their book entitled Trends in University Growth published by the University of Chicago in 1933.

In 1887, when Flavel S. Thomas published his pamphlet on university degrees, instruction was given in medicine, law, agriculture, engineering, architecture, and other specialized fields in a number of colleges and universities in the United States. It was given in order to prepare the student for a professional career so that he could practice medicine or law ably, or be a scientific farmer or a successful engineer, and the like.

Over the years since the 1880's, professional instruction has been offered in an increasing number of fields. As indicated by the Sixth Edition (1952) of American Universities and Colleges, edited by Mary Irwin and published by the American Council on Education, many institutions of higher learning offer professional instruction in one or more of the following fields:

Agriculture	Forestry	Nursing Education
Architecture	Home Economics	Osteopathy
Bible	Journalism	Pharmacy
Business Administration	Law	Social Work
Dentistry	Library Science	Speech
Education	Medicine	Theology
Engineering	Music	Veterinary Medicine

In a considerable number of instances this professional instruction is given in schools which form a distinct part of a university. The Institute of Technology at the University of Minnesota, for instance, offers professional instruction in many phases of engineering. The Bulletin of the University of Minnesota Institute of Technology, 1955-1957, shows that the Institute offers courses entitled Advanced Mine Air Conditioning, Surface Mining Engineering, Coal Mining Engineering, Petroleum Processing, Natural Gas Engineering, Oil Field Maps and Charts and the like.

The University of Michigan conducts eighteen schools, most of which are devoted to professional instruction. One is known as the College of Architecture and Design, another as the School of Business Administration. Three are devoted to dentistry—the School of Dentistry, the W. K. Kellogg Foundation Institute of Graduate Dentistry, and the W. K. Kellogg Foundation Institute of Postgraduate Dentistry. The remaining thirteen schools are entitled as follows: School of Education; College of Engineering; Horace H. Rackham School of Graduate Studies; Law School; College of Literature, Science, and the Arts (the liberal arts college); Medical School; School of Music; School of Natural Resources; School of Nursing; College of Pharmacy; Institute of Public Administration; School of Public Health; and School of Social Work.

There is a considerable variation in the offerings of different universities which can be detected to some extent by glancing at the list of schools comprising the respective universities. The twenty schools of which Ohio State University is composed are as follows and indicate some differences in curriculum emphasis from those found at the University of Michigan:

Graduate School

College of Agriculture

School of I
School of I
School of Home Economics

College of Arts and Sciences (the liberal
arts college)

School of Journalism

School of Optometry

College of Commerce and Administration
School of Social Administration

College of Franz The

School of Fine and Applied Arts
School of Music
College of Engineering
School of Architecture and Landscape
Architecture
College of Law
College of Medicine
School of Nursing
College of Pharmacy
College of Veterinary Medicine
Franz Theodore Stone Institute of Hydrobiology

Temple University has a College of Liberal Arts and Sciences (the liberal arts college), a Teachers College, a School of Business and Public Administration, a School of Fine Arts, a School of Theology, a School of Law, a School of Medicine, a School of Pharmacy, a School of Dentistry, a School of Chiropody, a School of Oral Hygiene, a School of Nursing, and a School of Medical Technology.

The listing of schools which comprise each of the large universities in the United States is a bony outline which scarcely indicates the vast scope of course offerings in American colleges and universities. A perusal of catalogues yields amazing information. The 1953-1954 catalogue of Massachusetts Institute of Technology lists among its many courses in physics the following: Experimental Acoustics, Architectural Acoustics, Physical Ultrasonics, X-Ray Diffraction, Microwave Physics, Nuclear Physics I and II and Advanced Topics in Nuclear Physics, Cosmic Rays and High Energy Phenomena. Among 61 courses in geology and geophysics offered by Massachusetts Institute of Technology are the following: Theoretical Crystallography, and Advanced Sedimentology. Sixty-five courses offered in aeronautical engineering include Rockets, Guided Missiles and Projectiles, Jet Propulsion Engines, and Advanced Aeroelasticity.

College and university curriculums have indeed kept pace with a technological age. The University of Pittsburgh, at Pittsburgh, Pennsylvania, is in the heart of a great industrial area which manufactures steel, bituminous coal derivatives, aluminum, glass, paint, and other products dependent upon chemistry. Consequently, the University of Pittsburgh devotes much attention to chemistry. Its 1951-52 catalogue listed sixty-five courses in chemistry and its Bulletin, The Graduate School, for 1954-55 listed thirty-eight courses in chemistry. The Spring, 1951, issue of Pitt, a quarterly magazine issued by the University of Pittsburgh, contained a number of articles which indicate the remarkable and continuous growth of one department of one university-the Chemistry Department of the University of Pittsburgh. One of the articles is entitled "Chemistry's Place in the College." In this article Stanton C. Crawford of the University points out that some attention was given to chemistry at "Pitt" as early as 1811 when the school was an academy, that a department of chemistry was established in 1875 and that in 1893 it was one of the first chemistry departments in the United States to offer co-educational laboratory instruction. Companion articles describe the University of Pittsburgh's research in many phases of chemistry.

The offering of a wide range of courses in colleges and universities poses many curriculum problems. Among the problems is the matter of presenting a first-year course in chemistry, or in biology, and in other subjects, to the student who plans to major in the subject and to the student who takes the course in order to be graduated. In the field of chemistry this problem has been met by offering two different beginning courses, one to assist the student who intends to become a chemist, the other to provide general education for the person who does not plan to become a scientist.

The Official Register of Harvard University, August 31, 1955, General Catalogue Issue shows that the Harvard liberal arts students can select courses in such varying areas as air science, anthropology, astronomy, fine arts, mineralogy, paleontology, Sanskrit and Indian studies, and social relations. At Yale the graduate student can receive instruction in drama, painting, sculpture, architecture, music, nursing, theology, engineering, and forestry. In other colleges and universities in the United States one may enroll in a great variety of courses including those which deal with anthropology, drama, dancing, statistics, accounting, insurance, plastics, textile manufacturing, pasture crops, and hotel management.

College and university offerings are so extensive that the catalogue of any large school is cumbersome, dull, and difficult to use. This writer does not see how the situation could be otherwise. A great number of courses need to be offered. The complete catalogue describing the curriculum of a university with an annual enrollment of 10,000 to 20,000 full-time and a large number of part-time students must be bulky. The person who searches patiently through the catalogue will find pertinent data concerning those offerings in which he or she is interested.

Today the curriculum of a typical university takes into consideration the needs of both men and women, of government, industry, agriculture and commerce, and of employer and employee. With the enormous expansion of its facilities and curriculum during the last thirty years, the large university in the United States now virtually achieves the objective which Ezra Cornell had in mind almost a century ago when he said "I would found an institution where any person can find instruction in any study."

OFFERINGS FOR OUT-OF-SCHOOL ADULTS

Providing for the educational needs of adults in a community is a big order. To date it is not being filled. Many school administrators sigh and wish they had lived in an earlier age so as to have been able to pioneer in education. They are inclined to think that, since public school systems have long since been organized and colleges and universities established in great number, education has stratified and the pioneer work is completed. In such thinking, school administrators are wrong. There are numerous opportunities in the field of education to do pioneer work today. Some of these lie in the area of adult education. The truth of the matter is that adult education is a particularly fertile field for the educator who longs to do some pioneering.

Since education actually is a life-long process and since school buildings are available to towns and cities throughout the United States every night at no extra expense other than for light and heat, why not use public school buildings to provide extensive educational opportunity for adults? Such opportunity can be made available at little cost other than for salaries of teachers. One's schooling need not cease when he or she leaves full-time

school and enters full-time employment.

A community can be a better place in which to live and make a living as a result of an adult school which has a broad curriculum geared to the interests, needs, and abilities of a large proportion of its adult population. The curriculum in the lower east side of New York should be different from that for a town of approximately 10,000 population in Kansas, or in a sparsely settled county in Arizona. A bit of imagination combined with facts concerning the population to be served can produce curriculums which will attract the attention of out-of-school men and women.

A 1955-56 announcement of the Adult Education Program of the Public Schools of the District of Columbia lists free courses in weaving, clothing, foods, dramatics, sociology, watch repair, creative writing, barbering, steamfitting, and in a host of other subjects. This variety enables almost any man or woman to find a course that will be of personal value. The announcement indicates that most of the classes are held at night. It lists a broad set of objectives as follows:

The adult evening schools [of the Public Schools of the District of Columbia] are organized to take care of:

Those who wish to complete the elementary or a high-school education.

Those high-school graduates who must complete special courses to enter higher educational institutions or specialized fields.

Those who need training to improve their earning power.

Those who wish training in trade and vocational work.

Those who wish to prepare for naturalization.

Those veterans who wish to complete high school; to prepare for college entrance; or wish special vocational training to improve earning pawer.

Those homemakers and prospective homemakers who desire to keep informed, on new and approved practices of homemaking.

Those who wish courses in teacher education.

Those who wish studies for the enrichment of life and civic responsibility.

In 1950 the Des Moines Adult Education program offered eight sessions on prenatal care. These sessions, taught by a graduate nurse, assisted by physicians, were held in the afternoon, a time convenient for those for whom they were offered. The course was repeated and could be entered at any time. Recently a six-session course entitled "Psychological and Psychiatric Aid for Parents of Physically Handicapped Children," was offered by the schools of Vallejo, California. Courses as specific as these two can be of great value to the persons for whom they are developed. A series of forums, panels, other discussion groups, and film showings, all of which deal provocatively with current social and international problems, can assist in developing an informed and thoughtful citizenry.

Organized adult education is accomplished by evening schools and by an increasing number of activities scheduled in the morning, in the afternoon, and on week-ends. Adult activities should be made available at times most convenient to those who wish to enroll; whether it be the housewife who can attend most conveniently in the morning, the man on night work who can attend late in the afternoon, or the office worker who can be

on hand only in the evenings or on week-ends.

At Tulare, California, an Adult Week-End School has been in operation for more than twenty-two years. In the winter of 1949-50 it held six Friday evening meetings starting with an outstanding speaker at six o'clock, followed by dinner at 7:15, music at eight o'clock, and a second speaker at 8:30 and adjournment at 9:45. With an almost universal five-day work week beginning on Monday morning, there are extensive opportunities for developing Friday evening and Saturday educational activities for em-

ployed persons.

The lyceum was a highly successful early form of adult education in the United States. It was an organized plan of instruction based on presenting essays, giving lectures, and conducting debates and discussions. It flourished between 1830 and 1860 and was followed by the chautaugua, an educational movement which brought lecturer and entertainers to large audiences and which was prominent in the American scene from 1880 to 1920. The establishing of thousands of public libraries and hundreds of free museums and art galleries, the increase in the average American's

mobility through improved transportation, and the advent of the personally owned automobile, the introduction of the radio and television, and the phenomenal increase in books and magazines published annually have all resulted in a great amount of learning for Americans in the years after leaving full-time school.

The problem of adult education has and continues to be the providing of planned and personally directed types of educational opportunity for men and women who have been away from school for a number of years, and for out-of-school youths. This need for providing personally directed activity results from the fact that many individuals, regardless of age, simply do not know how to use a good public library, a radio receiver, a technical magazine, and an automobile in such a way as to obtain pertinent knowledge rapidly and to do so week after week and month after month. Some who know how to use the facilities at hand need the stimulation which results from associating with an instructor or group leader and with fellow learners. The problem of adult education, therefore, hinges on providing a broad curriculum which will be as readily available to adults throughout the land as is elementary and secondary education for their children.

Adult education on an organized and extensive basis is relatively new in the United States. In the 1920's there was a movement to co-ordinate educational opportunity for out-of-school men and women. The American Association for Adult Education was founded by the Carnegie Corporation in 1926. Until about that time few cities and states did very much about education for adults, although there have been evening schools in some American cities for more than 150 years. Since 1926 adult education curriculums have grown rather rapidly but quite sporadically. Many local public schools have been providing curriculums for out-of-school youth and for men and women who have taken on the responsibilities of a job and raising a family. For several decades colleges, universities, and the United States Department of Agriculture too have played an important part in adult education by furnishing much useful information in hundreds of communities through extension service. In towns far from the campus they conduct classes in subjects which form a part of college curriculums, provide short courses and institutes to meet immediate practical needs of farmers and housewives, arrange special demonstrations, and provide educational films. On request they furnish pamphlet material and correspondence courses to individuals.

The American Association for Adult Education issued a number of publications, including its quarterly, the Adult Education Journal. The Department of Adult Education of the National Education Association published the Adult Education Bulletin bi-monthly from 1936 to 1950. In May, 1951, the American Association for Adult Education and the Department of Adult Education of NEA were superseded by a new organization, the Adult Education Association of the United States of America, which issues

Adult Education, a quarterly magazine. The new organization is associated with the NEA and functions as a department of the National Education Association.

These three groups, the one now active and the two which it superseded, have done much to enlarge and improve the educational offerings for persons who have left full-time school. Through the efforts of the former American Association for Adult Education, three handbooks on adult education were made available, in 1934, 1936, and 1948. The third, entitled Handbook of Adult Education in the United States, was edited by Mary L. Ely and published by Columbia University. It is a helpful source of information for those who develop adult education curriculums.

Since about 1920 adult education in America has come to be recognized as something very broad, something more than teaching traditional subjects in an evening school. It is looked upon as something which provides continued stimulation for a mature mind. For some men and women this continued stimulation will consist of instruction concerning meal planning or amateur photography, for others a forum on child care or international relations and the like.

Many adults desire part-time schooling so as to improve their earning capacity. Others wish to engage in educational activity so as to attain a more complete understanding of life because of the personal satisfaction which accrues from broadening one's horizons. Still others are in search of hobby interests which are mainly of an intellectual or mainly of a mechanical sort. In any instance, offerings for adults who have been out of school for several years should be built around the educational background and the desires of men and women who want to learn by means of an organized process. The curriculum for an adult education program must be good. Those for whom it is prepared may choose whether or not they will accept or reject it. Grownups cannot be expected to enroll in courses which do not interest them and for which they fail to realize a definite need. If adults accept a curriculum prepared for them and then find it not to their liking and needs, they can and do drop out. A person developing a curriculum for mature persons handling the full-time responsibilities of a work-a-day world must recognize the necessity to adjust the curriculum almost constantly to the changing needs of adults. As soon as the adult education curriculum is not in tune with the needs of those for whom it was prepared, it will start losing its appeal.

Because of the fact that many activities attract or demand the attention of almost every man and woman, it is desirable that an adult education curriculum be brought to the attention of the community in which it is offered. A person cannot enroll in an organized educational activity until he knows that it is available. A good curriculum can easily escape the attention of those who need or want it most. Many a worthy community project, such as the organizing of an adult education curriculum, receives little notice due to the enormous number of news items in which the

average individual is immersed. Furthermore, many people are not aware of some of their urgent needs and are equally unaware of some things they want until suitable education is brought to their attention, and

brought, perhaps, almost dramatically.

After making a careful study of the adult population of a community and providing a curriculum which coincides with the results of the study, the entire community deserves to be informed about the curriculum. Through ethical and wise advertising of appropriate adult offerings, a relatively large proportion of the men and women of a community can be enrolled and benefited.

The educator will do well to study the types of boys and girls who drop out of high school before being graduated, and the jobs to which they go. He can then draw the attention of these citizens to readily available evening courses which will help them in their present employment and which will gear instruction to the learner's rate of comprehension. In this way the youth of average ability who dropped out of school because of disinterest and the youth who found the curriculum too difficult may each continue their schooling for a number of years and gain much of value by doing so.

Formal schooling during childhood and youth is designed mainly to give one a start in life. Early schooling is not an air-tight, complete package. It is something that can be added to, expanded, even after an interval of ten or fifteen years. The person who is graduated from high school and then immediately accepts a full-time job and stays with it can benefit from adult curriculum offerings in a night school. The college graduate, too, can benefit from such a curriculum. In short, adult education is not limited to providing courses for men and women who left school at an early age. It has the possibility of offering educational opportunity of a cultural, vocational, or recreational nature, on a part-time basis, to all grown persons of sound mind, including those who have been graduated from college.

The world changes so rapidly that people find it desirable to continue their schooling after entering full-time employment, even though they may have been graduated from college. In our technological world, adults are becoming increasingly aware of the need for education. Some of them desire to fill the gap in their lives caused by leaving school at too early an age. Others want to learn about scientific and social changes which have taken place since they left school. Still others desire to acquire specific vocational skills. Life has changed so swiftly in the last quarter of a century that the average individual now needs much more formal schooling than previously, and beyond the school years needs to learn many more things than was the case in his father's and grandfather's post-school years. Today any adult of approximately average intelligence or higher can benefit from participating in organized education. Perhaps a third are in need of it and should avail themselves of adult offerings.

As a result of increased urgency for education, several millions of men and women in the United States attend evening schools, or enroll in special day schools. In this way they are able to attend lectures, demonstrations, forums, and college extension courses. Fortunately, in large cities there is a fairly wide variety of courses available for the out-of-school adult. The courses range from those in which one is taught how to read and write to those which result in college credit. Even so, adult education curriculms have not been made available to such extent as to draw the attention of many of those adults who are in greatest need of schooling.

Adult education is an extremely broad field. It is as broad as life itself. The Division of Adult Education in Hawaii expressed this concept by printing the following objective on its envelopes, "Life Long Learning for All Adults—Hawaii Adult Community Schools."

Adult education includes formal and informal instruction on a part-time basis for those who have left full-time school. Adult offerings can be, but usually are not, of as intense nature as college courses. The adult education curriculum can include offerings on an elementary, high-school, private vocational school, junior college, or college level. A large proportion of adult offerings are below college level. Many are scheduled on a no-credit basis. In general, people enrolling in an adult educational activity are more concerned about acquiring knowledge or skills than about credits and diplomas. Sometimes activities which are almost entirely recreational or social in nature are heralded as "adult education." This has been the case during the last twenty years. An activity ought to furnish continued stimulation for a mature person in order to be dignified with the term adult education. A community dance or picnic should be regarded as a social affair and not claimed as an adult education activity. Even though adult education is a broad field, the curriculum planner should keep his thinking cap on when laying out an educational program for the grown-ups of a community, and should circumscribe himself with some reasonable bounds. An activity which provides education only as an incidental by-product should not be looked upon as an educational offering for a mature person.

The term adult education is somewhat nebulous. Adult education is a broad area which has developed in somewhat different directions in different cities. The Dictionary of Education, edited by Carter V. Good and published by McGraw-Hill Book Company in 1945 defines it as:

any voluntary, purposeful effort toward the self-development of adults, conducted by public and private agencies, such as adult schools, extension centers, settlements, churches, clubs, and Chautauqua associations, for informational, cultural, remedial, vocational, recreational, professional, and other purposes; utilizes such forms of class or group as the colloquy, discussion, panel, forum, round table, reading circle, institute, tutorial class, and short course; directed toward such special subjects as citizenship, consumer problems, co-operatives, child welfare, farming, health, and industrial relations and to the fields of art, literature, and science.

The field of adult education presents almost unlimited curriculum possibilities. Factory workers, executives, specialists, in their 30's, 40's,

and 50's, or beyond, are likely candidates for the evening school or special day school when a curriculum meeting their interests, needs, and abilities is provided. Executives and specialists need and will accept courses which provide diversion from their daily schedule and which broaden their horizons if the courses are planned and taught in such a way as to be interesting to a mature person.

Millions of American men and women who have been away from classrooms for twenty years are trying to find their way in life. An extensive curriculum which appeals to the out-of-school man and woman, offered at hours of the day and evening convenient to various groups of adults and mostly on a no rigid end-of-course examination basis, can result in a large proportion of these individuals enrolling. The prospect nearly staggers the imagination.

Where too few adults desire instruction in a particular subject to form a class, it frequently is possible to find a correspondence course to meet the need. Combinations of lessons from more than one course can be made to fit the interests and needs of one adult. Numerous universities and private correspondence schools offer a wide variety of courses by correspondence. Some of these courses can be completed in a few days, some require study over a period of several years. They deal with high-school subjects, with technical fields such as dairying and steam plant operation, and also with college subjects such as sociology.

For many people of mature years, correspondence study is a particularly well-suited way of learning. Consequently, correspondence courses can appropriately become a part of the offerings of schools having adult education programs. Supervised study helps to erase the shortcomings of the correspondence course. In correspondence study a bit of good supervision goes a long way. Under a plan of supervised study, all persons enrolled in correspondence courses meet at a specified place at stated times. A teacher encourages, and to some extent assists, the members of the group, although each may be studying a different course. This encouragement and assistance decreases the typically high drop-out rate in the correspondence study field. Adult Education Ideas, No. 4, a leaflet issued by the United States Office of Education in May 1949, stated that nearly 300 adult programs had recently indicated they were using supervised correspondence study. Three thousand, or even 30,000, would be a more logical figure. It could be attained, and on a sound basis.

Two books appearing in 1955 show the tremendous possibilities lying ahead in the field of adult education, and indicate how various types of adult education programs can be organized and conducted. One of these two books, Adult Education, by Homer Kempfer, published by McGraw-Hill Book Company, Inc., states in its preface: "Adults are literally demanding that educational opportunities continue throughout life." The other book, Adult Education and Group Work, was written by Louis Lowy and published by Whiteside, Inc. and William Morrow and Company. It

discusses, in detail, group work with young adults, with parents, and with older adults and enumerates principles of group work as applied to adult education. The book includes numerous examples of how the interest of adults has been aroused and maintained in learning activities.

No one knows very definitely how many adult education programs exist in the United States, or even the total number and type of evening schools for adults. It is known, however, that the variety of planned educational opportunities for employed persons, housewives, and those who are retired is relatively extensive in quite a few of the forty-eight states. These opportunities are made available by public and private organizations. Nevertheless, there is comparatively little data at hand which indicates the quality of adult education curriculums in the various states. The Regents' Inquiry in the 1930's into the character and cost of public education in New York included study of adult education within that state. One of the books issued as a result of the Regents' Inquiry is entitled Adult Education and was published by McGraw-Hill Book Company, Inc. in 1938. In it the authors of the volume, F. W. Reeves, T. Fansler, and C. O. Houle, evaluated the program, found it wanting in specific objectives, and referred to it as being in "chaotic condition." Their principal recommendations concerned a much enlarged adult education program developed by and administered from the State Education Department. (See particularly pages 94, 115, and 165).

A study concerning adult education activities conducted by public schools was reported in Pamphlet No. 107, Federal Security Agency (now U. S. Department of Health, Education, and Welfare), Office of Education, 1949, by Homer Kempfer. The pamphlet is entitled Adult Education Activities of the Public Schools, Report of a Survey, 1947-48. The Kempfer pamphlet gives a mass of statistical information which is approximate rather than exact. It shows that public schools were then serving about 3,000,000 adults and out-of-school youth.

In a nation of 167,000,000 people, the figure could and should be 30,000,000 or more. It is possible to imagine without dreaming that twenty to thirty million men and women and out-of-school youth who are beyond compulsory school age would enroll in adult education activities built to their needs, and changed from time to time to meet their changing needs, if offered at convenient times and places and conducted by persons who are experts in dealing with mature individuals.

The Office of Education study referred to above was made by means of a checklist sent to 4,815 school districts representing all forty-eight states and the District of Columbia. The checklist was mailed between April 1 and August 31, 1948. It enumerated thirty-six types of educational activity (nearly all being typical of adult education programs but not all mutually exclusive) and twenty-four fields frequently included in educational programs for men and women having full-time responsibilities beyond school.

The checklist called for indication of educational activities sponsored by the board of education for adults and out-of-school youth since July 1, 1947, place where the activities were held (in school buildings, other public buildings, settlement houses, and the like), and approximate number of persons enrolled or served during the year 1947-48. The thirty-six types of educational activity enumerated on the checklist were as follows:

An evening or an adult school Afternoon classes Morning classes A continuation school (any kind) An opportunity school An open forum Civic education discussion groups A lecture series A concert series Film forum discussions Film showings Radio broadcasts for adults Radio listeners' groups Conducted excursions Directed visiting and observation Exhibits to the public Directed individual reading Supervised correspondence study Individual tutoring services Training-within-industry programs Related apprentice training Group conferences Workshops or short institutes Educational camps Community center activities A little theater Training for community leadership Consultation services to club leaders Planned educational leadership or services to community organizations School-sponsored clubs for adults Adult guidance services A community council A block leader organization A young adult program for youth above school age

Newspaper columns or features (in content areas—exclusive of public relations).

The twenty-four fields reproduced on the Office of Education checklist were the following:

Literacy education Americanization or immigrant education Elementary education for adults

Special activities for people past retirement age

High-school subjects for adults College level subjects for adults Civic and public affairs education Consumer education Intercultural understanding Trade and industrial education Agricultural education Business education (including distributive education) Labor-management relations Workers' education Arts and crafts-hobbies Recreation Physical education and fitness Health education Music education **Dramatics** Safety education Homemaking Family life and parent education Preparation for marriage In-service training of public employees.

The checklist returns as reported in Office of Education Pamphlet No. 107 show that the evening school is the major type of educational service which the public school provides for adults. Sixteen-hundred-one (1,601) of the 2,684 school districts reporting adult educational activity indicated the sponsoring of an evening or an adult school. Two-hundred-ninety (290) school districts indicated that college-level subjects were offered in 1947-48 as part of their adult programs. It is presumed these courses were offered by the evening schools in the 1,601 districts mentioned above.

Pamphlet No. 107 shows that after evening or adult schools the most widespread types of educational activities sponsored for adults and out-of-school youth by public schools were, in the following order, exhibits to the public, related apprentice training, film showings, training-within-industry programs, afternoon classes, workshops or short institutes, community center activities, open forums, concert series, lecture series, and adult guidance services. Four-hundred-seventy-seven (477) school districts claimed to sponsor afternoon classes and 269 claimed to sponsor morning classes for adults and out-of-school youth. The checklist returns indicated that most activities sponsored by the public schools for adults and out-of-school youth in 1947-48 were held in school buildings.

Statistical tables 4 and 5 given by Kempfer indicate that recreation was sponsored by more school districts than was any other activity for adults and out-of-school youth. These tables point to the following activities as next in order on basis of being reported by greatest number of school districts—agricultural education, homemaking, high-school subjects, trade and industrial education, business education (including distributive [sell-

ing and merchandising] education), arts and crafts, Americanization, physical education and fitness, music education, family life and parent education, with 1,033 districts reporting recreation, 1,004 agricultural education, and 414 family life and parent education.

In round numbers, literacy education was reported by only one out of eight schools which returned the checklist, and almost an identical proportion reported elementary education for adults. Such an important field as civic and public affairs education appears to be neglected by many public school programs for adults. Only 219 of the 2,684 school districts reporting adult educational activity indicated the sponsoring of this activity.

Kempfer points out that adult education is developed rather highly in a number of states but that much needs to be done to extend educational opportunity to adults. According to the checklist returns, California, Wisconsin, New York, Iowa, Utah, and Colorado led all other states, and in order named, in percentage of population involved in adult education activities sponsored by public schools in 1948. Even so, California, topping the list, had only 5.87 per cent of its 1948 population enrolled in educational activities sponsored by public schools, for adults and out-of-school youth. Less than 1.5 per cent of the nation's total population were involved in the adult education activities sponsored by public schools across the country in 1947-48.

The evening school has made many contributions to adult education in the United States and still is an excellent means of providing educational opportunity to persons beyond the usual school age. From the standpoint of number of paid personnel, the evening school looms very large in the field of adult education. Most adults are free in the evening and a large percentage are not in daytime. Evening school classes are relatively easy to organize and conduct.

100 Evening Schools, issued by the United States Office of Education in 1949 as Bulletin 1949, Number 4, was prepared by Homer Kempfer and Grace S. Wright. This bulletin shows that, in 100 public evening schools in thirty-six states, courses in the following fields were taught in one or more of the schools during the fall, winter, or spring terms of 1948-49: business education (typewriting, shorthand, bookkeeping, commercial law, and the like), trade and industrial education (electricity, machine shop, meat cutting, television, and the like), arts and crafts (photography, jewelry making, and the like), homemaking (millinery, slip covers and draperies, and the like), English and speech, health, safety, physical education and recreation, mathematics, foreign languages, immigrant education, music, social studies, science, family life education, psychology and personal development, agriculture, elementary education, and a few miscellaneous courses including lip reading and navigation. (Pages 9-14). On pages 3 and 4 of 100 Evening Schools it is estimated that cities of more than 50,000 population have from 400 to 475 public evening schools of all types, and that there are probably 2,000 evening schools in this country,

although many of these have a very limited program and are scarcely worthy of being counted.

Estimates vary greatly as to the number of persons in the United States who engage in adult education activities. In September 1952 the Division of Adult Education Service, NEA, issued A Study of Urban Public School Adult Education Programs of the United States. On the basis of returns to a questionnaire of February 1952, the study estimated a total enrollment of 4,744,256 in adult education activities in public schools in this country. (Page 4). The 171 pages of the study give a great quantity of approximate rather than precise information about such matters as types of curriculum offerings and types of persons enrolled. The Winter 1955 issue of Adult Education contains an article by Malcolm S. Knowles, "Adult Education in the United States." On page 76 he uses a chart to show that almost 50 million Americans participated in adult education in 1955 but he includes five million listeners to educational radio and TV, fifteen and one-half million who attend Sunday Schools, etc., and more than eight million who benefit from agricultural extension work.

A review of the two publications of the United States Office of Education and the one by the National Education Association, referred to above, and other pertinent sources indicates that good programs of adult education (evening school and others), whether consisting of few or extensive offerings, are spotty in the United States. Organized adult education has not yet gained very great stature in this country. One city with a population of 50,000 people may have a highly satisfactory program and the city of approximately 50,000 population located nearest to it may have almost no program for men and women and out-of-school youth. Adult education lacks standardization within states as compared with elementary and secondary education and has as yet acquired very little dignity as compared with that accorded to and treasured by colleges and universities. Furthermore, there is relatively little uniformity in the adult education programs of the respective states, except that there are similarities between good programs wherever found. An outstanding program in a particular city or town can probably be traced in most instances to the interest and imagination of an educator or other citizen in that community.

Earl James McGrath, formerly United States Commissioner of Education, made the following pertinent remarks on pages 14 and 15 of his annual report for the year ending June 30, 1950.

The size of the task of providing education for our large adult population can be judged from a study of the amount of schooling certain population groups have. Although eight or nine million adults have four or fewer years of formal education, and may be considered functionally illiterate, fewer than 100,000 of them are currently enrolled in literacy classes. An estimated forty million adults are conscious of the need for further learning under instruction, mainly in public affairs, home-making including family life and parent education, vocational skills, commercial and business education, and recreation including physical education and arts and crafts, but at last count the



The High-School Classroom Lends Itself to the Development of Leadership Qualities

Presenting a summary of a book, film, or event to fellow students can cause one to put his or her thoughts in order and to express them clearly. Numerous other activities suitable for the classroom also develop qualities which are possessed by leaders. Those activities should be conducted in a way which makes them highly interesting to the students, and just as instructive as interesting.



Good Schools Develop Creativeness

From elementary school through the university, an emphasis on creativeness develops initiative and the power to transmit facts and ideas. The normal child and youth develop creativeness through conducting experiments, writing reports, and making talks before his or her classmates and other groups. Children and youth for whom special curriculums are made available can also develop creativeness. Weaving on a simple loom or on a more elaborate one, as shown in this picture, provides opportunity to develop creativeness, especially for the mentally retarded, the emotionally unstable, and those physically handicapped who are deaf, mute, or badly crippled but who can sit and have full use of both hands.

public schools enrolled only about three million of them. The rest of the adult population could profit from imaginative community-wide educational undertakings in civic education and competence, consumer education, family-life education, human relations, and the understanding of world affairs. Practically all of the adult education offered by the schools is designed to serve individuals. Schools are doing very little to improve the effectiveness of groups in their intergroup relationships.

Mark Van Doren, in his book entitled Liberal Education, 1943, Henry Holt and Company, goes even farther than the former United States Commissioner of Education in outlining a program of adult education. Van Doren suggests an across-the-board sabbatical year of adult education for American men and women, a truly staggering proposal and one which may become rather largely a reality within a generation or two. In Van Doren's words (pages 104-105):

There are no sabbaticals for all, seventh years in which every citizen may refresh his understanding either of his own trade or of the life common to men everywhere. As citizen and as a person he can still afford to learn: to catch up with ideas he has missed, to become acquainted with new ones, to unlimber his soul for the career which remains. He particularly needs refreshment in his own specialty, which for him is the cardinal progressive study. The best way to get this is to be relivened in its theory, which now he is ready for the first time to consider in its broadest aspect. As things go, he must be content with courses which teach new tricks of the trade—the latest dodges and devices, psychological or mechanical. These have their immediate use, and the halls of adult learning are potentially so vast that there should be ample room for them. But there is the further need of the pleasures peculiar to deep and original thought concerning what one does. A sabbatical might be the time when rich and difficult books about one's calling could be thoroughly read. Such books are more than refreshing, they are relaxing in a degree that out-of-the-way works seldom are. To think more after years of thinking less is being born again.

Such sabbaticals for everybody are remote, but they are no more preposterous than the annual vacation must once have seemed. As a vacation gets us through the remaining months, so a seventh year of leisure might get us through the years. And it might get modern society through certain centuries which are the subject of prophetic brooding. It may be only adult education, conceived on a gigantic and liberal scale, that can bring the world commonwealth into being.

These statements by former Commissioner McGrath and Mark Van Doren truly are startling. They point to a fertile field for the educator. The opportunity to develop an expanded curriculum for those who are no longer enrolled in full-time school is at hand in almost every city and town in America.

CURRICULUM CHANGES SHOULD BE BASED ON FACTS COUNSELING SOLVES MANY CURRICULUM PROBLEMS

These two sections appeared in the November 1954 issue of *The Bulletin of the National Association of Secondary-School Principals*, pages 103-111, in the form of an article. It was entitled "The Curriculum and Its Relation to Guidance", and is summarized here. Many conditions change from

year to year while others remain constant. Curriculums, therefore, need to be changed from time to time—relatively little in the elementary school, very much in some parts of a large university, and a great deal, and frequently, in programs of adult education. Facts which relate to the persons to be served by a curriculum and facts which relate to the job market should be the basis for curriculum changes. This principle is fundamental.

After reliable and pertinent statistical facts, about the job market or about the persons to be served by a particular curriculum, have been assembled, they need to be interpreted wisely in order to use them well as a basis for curriculum changes. The assistance of several philosophers and of a few scientists can be useful in the interpreting process. Their views can assist the educator in making changes which will be of immediate and long-range benefit to both the students for whom the curriculum is being revised and the community in which it is to be used.

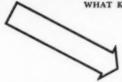
Much of the handicap suffered by American schools as a result of mass education and regimentation can be offset by good counseling. Individual guidance (counseling) requires almost limitless patience, an understanding of the person to whom individual guidance is being given, an understanding of his problem, imagination of the type necessary to foresee the results of alternate possible solutions to the problem, and a firm faith in the ultimate worth of the individual.

Counseling a student concerning the selection of courses is a three-step process—preparing for the interview, conducting the interview, and following up.

THIS WE SHOULD EXPECT:

Continuous, systematic study designed to produce flexible curriculums which meet the current needs of the nation and of individual children, youth, and adults having a sound mind.

In order for education to be useful, it must have significance in life. It dare not be a matter of merely going through motions like an animal jumping through the hoop of its trainer. Education must be related to life and in such manner that the student develops a sense of social responsibility and the habit of thinking for himself or herself. We should expect this utilitarian concept to be the basis for curriculum development.



The last three chapters have discussed school problems from the standpoint of improving educational opportunity for every one. The next seven chapters deal with the adult and his or her problem of putting to use, and enlarging, the education received during the years of full-time attendance.

The value of schooling lies in the application of what is learned in school. Any learning must be applied in order to be useful. After leaving full-time school, the individual should build on the educational foundation secured during the school years. If his (or her) schooling was sadly deficient in any respect, he should first improve the foundation, and then build upon it.

Book learning alone, or vocational skills by themselves, do not provide a well balanced life. Knowledge, skills, points of view, and activities which help men and women attain a well balanced and useful life are discussed in the next seven chapters.

How Well Do We Read?

Literacy
Remedial Reading
Selectivity
Ear Plugs?
What About Underlining, Note Taking, and Rereading?
Evaluating the Printed Word
Improvement of the Mind

THE world's storehouse of knowledge is available to those who read well. To them the written word is a means of increased usefulness and a source of companionship. Persons who read very slowly or with poor comprehension need assistance. Those who believe all they read are a potential danger.

How Well Do We Read?

B OOKS, pamphlets, and articles are a prolific source of ideas. Those who read well and choose carefully what they read have a great advantage. By interpreting what they read and by using it for their specific purposes, they can benefit and can produce valuable contributions. Yet, what a wide range is found in the ability to read!

Some men and women read highway signs, price tags, and newspaper headlines, but little else. Others read masterly books and understand what they read. The former may read newspaper comics, tabloid newspapers, and picture magazines such as *Life*. If the page is not devoted mainly to pictures, or if it progresses to a solid paragraph or two, they have a tendency to avoid it.

The person who reads by pronouncing each syllable laboriously as he reads silently is not likely to enjoy reading and is apt to do about as little reading as necessary. The person who reaches for something to read almost whenever he has a few moments of leisure time is one who reads well and who enjoys reading.

LITERACY

Dividing people into two classes, the literate and the illiterate, is a more complex matter than it might at first appear to be. Illiteracy is defined in various ways, but basically means inability to read.

It would seem that with compulsory education, illiteracy should be a thing of the past in the United States for persons beyond ten years of age, except a very few who are mentally defective. A report by the United Nations concerning illiteracy is found on pages 486-494 of its Statistical Yearbook for 1949-50. No doubt the report is reasonably accurate even though the gathering of world statistics is still in a rather primitive stage. The report indicates that the United States has an illiteracy rate of 4.3 per cent, with Czechoslovakia having 4.1 per cent, Canada and France each having 3.8 per cent, Finland 0.9, and Sweden only 0.1 per cent.

A comparatively high rate of illiteracy points a finger at grown-ups rather than at children. The latter are learning to read or already have learned.

Millions of American people who are considered literate to the extent that they can read a newspaper in their native tongue, whether English or another language, are actually near-illiterates because of their inability to evaluate, or even to understand, what they read. No one knows how many adults in the United States are near illiterate in the sense of reading very poorly. Depending on the definition of "very poorly," the number would be several millions or many millions.

REMEDIAL READING

To many persons the term remedial reading probably suggests a painful process of teaching one to recognize and pronounce words who should already have learned to read anything found in the waiting room of a dentist's office. Remedial reading is instruction. Remedial reading can be a matter of individual or group instruction, or a matter of self-instruction. Its purpose is the correction of faulty habits of reading so that one's reading efficiency (speed and comprehension) will be increased.

The adult who cannot read well has at least one strike against him. Leaders are readers and obtain many facts and ideas of value from their reading. Few persons in important leadership positions are poor readers. A large proportion of technicians, too, read well and depend heavily on manuals, books, memoranda, and the like in carrying on their work.

Some adults read rapidly, understand what they read, but soon forget what they have read. Some read slowly and do not comprehend what they read. Others read slowly, or rapidly, and retain a comparatively large part of what they see in print.

An intelligent adult who reads a great deal may not be in serious need of remedial reading. Nevertheless, many adults can increase their reading efficiency very much through a systematic attempt to do so, either by attending special classes or through giving attenion to good principles of reading when consulting the printed word at home or on the job. A systematic attempt to increase reading efficiency includes the following:

- 1. Requiring yourself to read a bit more rapidly than is comfortable.
- 2. Reading phrases rather than words.
- 3. Avoiding habitual backtracking (regression) after reading a line.

 4. Thinking about what you are reading while reading it so as to
- Thinking about what you are reading while reading it so as to absorb what you are reading rather than merely going through the eye motions of taking in words.

Reading is a basic skill in modern life. Like other skills it can be improved through appropriate practice. Reading much, with a conscious effort to improve reading efficiency, can produce startling results. The person who desires to improve his or her reading efficiency can find specific instructions for doing so and reading tests in a book by Norman Lewis entitled *How To Read Better and Faster*. It was published by Thomas Y. Crowell Company, New York, in 1944 and is available in many public libraries of all sizes.

The use of glasses assists much in reading. Without glasses there would be far less printing as there would be far less reading. In addition to taking the matter of glasses into consideration, remedial reading assists persons who have a mirror-image and, therefore, read backward, and those who mistake words, such as pig for pie and cat for rat.

Remedial reading attempts to eliminate movement of lips or throat or pronouncing words in the mind while reading silently. It attempts to widen the perception span so that the eye will take in at a glance phrases rather than individual words. It strives to shorten the duration of fixation (time spent looking at a phrase before passing to the next), and to eliminate regression (going back and rereading a phrase before proceeding).

Remedial reading may be necessary because of poor instruction during the school years or due to physical, emotional, environmental, or psychological causes. To a rather large extent poor reading among adults is due to slow eye motion and also to knowing relatively few words and little about them.

Remedial reading is particularly useful for children who have a physical defect which makes reading difficult for them, and for adults who have a specialized assignment requiring a reading speed beyond their present rate. When a man moves from a job requiring little reading to one calling for review of many and lengthy narrative reports, he probably will find himself swamped. It may be necessary for him to work an hour or two a day overtime in order to keep up with the work load. In such instances remedial reading will be helpful.

Courses in reading for adults who read fairly well are dignified by such terms as Rapid Reading Course and Reading Improvement Course. The average reading speed for adults across the nation is probably about 200 words per minute. For some rapid reading courses it is claimed that an increase in rate of reading up to 200 per cent—improvement of about 400 words per minute—is made. Rapid reading courses emphasize that eye speed is the key to better reading. They stress the reading of phrases and sentences rather than words. The tachistoscope, a mechanism which exposes words for one fifth of a second or less, is used in such courses to develop perception. Words, phrases, and sentences are projected on a screen at gradually accelerated and carefully timed speed. The eye must function immediately in connection with each projection in order to catch all the words before they disappear from the screen. Drill, by means of tachistoscope projection, causes the eye to increase the number of words that it can take in at a glance.

As long as speeding the rate of reading does not interfere with reading comprehension, the speeding up process is good. Reading fast just for the sake of reading fast accomplishes nothing. Unless one understands what he reads, his time spent in reading is wasted.

A relatively small number of universities and some independent organizations offer rapid reading courses. These courses attract substantial people. For example, many of those who are enrolled in the George Washington University Reading Clinic in Washington, D. C., are graduate students.

Business corporations, and agencies of the Federal government, have made rapid reading courses available to selected employees. The United States Air Force has provided rapid reading instruction rather extensively and finds that it is not unusual to increase reading speed during thirty hours of instruction from 300 to 500 words per minute with almost no loss

of comprehension.

Rapid reading which does not sacrifice comprehension enables a person to save time in reading mail, written instructions, and technical journals. One who reads rapidly should learn to scan articles and books in order to grasp their meaning without reading in entirety. This practice, in conjunction with reading rapidly, saves a great deal of time. An increase in reading speed, and ability to scan, permit an individual to read additional books. Rapid reading combined with comprehension brings efficiency to the job as it provides more time for planning of regular work than would otherwise be the case and also provides time for creative thinking about those matters on and off the job which deserves one's attention but which may seldom receive it.

Advocates of rapid reading courses claim that such courses can save one third to one half the time spent on "paper work" and that increasing the rate of reading will assist any responsible person—the businessman, the

professional person, the student, and the housewife.

To be proficient in reading one must understand what he or she has read. High schools should teach their students to read and to know what they have read to the extent of the boy or girl being able to read a paragraph and tell to others what it means without stopping to reread it. An astonishing number of people cannot comprehend quickly what they have read. In fact many college students have an unenviable reading achievement. Colleges, too, should teach their students to absorb content on first reading. Especially should colleges do this in two instances:

 Where the high school has failed to develop a reasonable amount of reading ability, and

2. In the instance of technical reading assignments which are entirely different than any on the high-school level, such as in the fields of educational methods, personnel administration, and steam plant design, construction, and operation. (More profound assignments, especially in the humanities, will require reflection and a second reading).

Those who do not understand what they read do not read well, regardless of how rapidly they read. They are in need of remedial reading and can obtain it on a self-instruction basis. An excellent way for a person to develop the capacity to understand what he reads and to learn to read without hesitation is to select worthy articles or chapters, read a paragraph, and write, concisely, in his own words, preferably in a sentence, the thought which the author makes in the paragraph, and repeat for each succeeding paragraph. Writing a digest in this way of what you have read is a helpful

discipline. When unable to summarize a paragraph on first reading, it should be reread and then summarized, without peeping! Drill of this sort, self-imposed, rigorously, will improve reading comprehension amazingly in a short time.

As one reads he should conquer words which are unfamiliar to him. If he does not do so his reading comprehension will be retarded. While in the process of summarizing paragraphs in his own words, the reader should grapple with the words which baffle him. A small vocabulary is a serious handicap in reading. Words which are new to the reader delay him like a washed out bridge on a highway delays vehicular traffic. Being confronted with an unfamiliar word may cause the reader to slow down or to skip it and lose the meaning of the sentence, and perhaps of an entire paragraph.

One of the best ways to increase vocabulary is to learn the meaning of unfamiliar words by reading in context. When reading in context a person attempts to learn the meaning of a word through the way it is used in the sentence. He determines its meaning by its setting in the sentence, its relation to the other words in the sentence. To learn the meaning of a word by context, the reader pauses when seeing a word that is unfamiliar to him and rereads the sentence in which it is used. He reflects for an instant as to its meaning and then continues reading succeeding sentences. When the sentence is meaningless to him because of the unfamiliar word, even after brief reflection, he should consult the dictionary before reading farther.

Making a practice of reading in context and looking up in the dictionary, immediately, the meaning of words not understood by reading in context will soon decrease the extent of dictionary use and will build vocabulary to the point of a relatively large knowledge of words, in general, and in the specialized field to which the reader is devoting attention. This habit of building vocabulary is an excellent habit and should be continued even beyond the time when a person is in need of remedial reading.

The person who improves his reading markedly builds confidence not only in his ability to read but also in his ability to handle his job and to converse with others on and off the job. As he gains confidence in his ability to understand what he reads, he may gain the confidence which is necessary for him to have in order to do a number of things proficiently. Ability to read well is a foundation stone. It is the beginning of a chain reaction.

SELECTIVITY

It is possible to glean great gems of philosophy from comic strips in newspapers and to acquire much useful technical information by reading newspapers and popular magazines. However, since reading soon becomes very time-consuming and does little good unless it is carefully selected and then put to use, it seems wise for any person to be discriminating in choice of reading material. There is danger of reading too much. Time is necessary to think about and use what is read. An individual should take time to associate with others. If he is engaged in work requiring much eye strain, his leisure will not provide sufficient relaxation if devoted mainly to reading. These

facts point to further need for selectivity in reading.

During leisure time it is well to be "choosy" and to read what you want to read, to examine for yourself a book and then read or reject it because of your decision, rather than to read the books which are being talked about most at any one time. A large proportion of those now being discussed will be forgotten in a few years. Decide for yourself, read for enjoyment and your own benefit, and do not be brow beaten into reading a book which you scorn. This personal selection and evaluation is good for one's intellectual self-respect. Strive to obtain pleasure from reading instead of making reading a painful task. Some items which we find it necessary to read are distasteful, but they are of a procedural type and must be absorbed, such as a portion of the many instructions and regulations which are typical of modern life. This situation we accept. We recognize it as a necessary part of a complex civilization. But when quiet leisure time is at hand, we can exercise the choice of reading what we want to read. If the material selected appeals to our intellect in addition to providing pleasure, the benefit will be twofold.

One's type of work, personality, and physical condition have a bearing on selectivity in reading. The person who mixes with people all day long on the job uses his or her eyes little for reading or other close work during the day, wants to withdraw from people after working hours, reads rapidly and spends many hours reading in a typical week, need not be as selective as the person who uses his eyes at close range almost constantly on a sedentary job and is rather isolated from people during working hours. For the latter person it may be better to do little rather than much reading when away from the job,, and to be highly selective in his reading.

Until one has developed a moderate reading ability, he should read about things with which he has had some experience, so that the reading will have meaning for him. When a person reads a pamphlet or book of his selection about subjects with which he has had experience—the electrician with installation of flourescent lights and use of BX cable, and the like—he will derive more benefit from the reading than if having printed items thrust on him which deal with matters beyond his experience. It is advantageous for him to select reading material which he can use to enlarge and reinforce what he already knows in substantial part. As he increases his reading ability, he can branch into fields which are unfamiliar to him.

Great thrills are experienced almost daily by the efficient reader when selecting for himself the books, articles, and pamphlets which he reads. Consulting the printed guides found at the reference desk of a public library is a good practice when making a selection of reading material. Browsing in libraries and in book stores during odd moments and actually

examining and handling books which intrigue you and which you did not know had been published is a means of gathering many useful ideas and is a fascinating diversion. Browsing is also an excellent way to make an intelligent selection of reading material. It is a selection device which is employed by thousands of persons. Frequently, as a matter of selectivity in reading, it is well to pick out of a book the parts which interest you, scan them or read them carefully, and skip over the remainder.

EAR PLUGS?

Concentration is necessary in order to do effective reading. Generally, focusing attention on one thing at a time is an element of success in any occupation. Such focusing is highly desirable in reading, as lack of concentration when reading results in wasted effort. How much benefit does one derive from many hours of reading if he is unaware of the subject or central theme of the book or other item being read and the main points which the material contains?

Concentrating for a few moments is one thing, for twenty minutes or an hour is another. One should be comfortable when concentrating on reading for more than just a few moments. If noise bothers you when reading, find a quiet place. Many people claim that noise does not disturb them when reading. Some persons can be in the middle of Grand Central Station in New York on a holiday, read works such as Blackstone's Commentaries on the Laws of England, and concentrate so completely as to absorb much of what they read. Many claim to enjoy reading while a radio a few feet from them brings music or the spoken word and various sound effects to their ears.

Ability to concentrate in spite of noise has its advantages. If you virtually become a bronze statue when reading and concentrate so completely that you hear nothing except loud and unusual noises you will be fortunate to a large extent—unless something which has been giving moderate warning sounds is about to crash on you or a maniac with a hatchet and intent to dissect is approaching!

Partial deafness has been hailed as an asset. A stable person who can hear perfectly through the use of a hearing aid and who can exclude almost all noise at will by flipping a simple switch on his person probably has few difficulties in concentrating when reading.

Being alone when reading helps avoid distraction. During working hours many people cannot find a quiet place to do the reading called for by the job. In such instances the person who has difficulty in concentrating amidst noise may learn to concentrate in spite of it, after repeated efforts to do so.

It is good to build a personal library and place it in a small comfortable room at home if the luxury of an extra room is at hand. There, among choice books, concentration will be a relatively easy matter. Improper light when reading causes fatigue which hinders prolonged concentration. Enough light, but subdued, should be available so as to avoid eye-tiredness because of glare or insufficient light.

If you have a tendency to go to sleep when relaxing in an easy chair, then sit on a straight back chair of a dining room or office type when reading. If you need fresh air in order to concentrate when reading, get it. Some people, on the other hand, seem to concentrate very well in a noisy place, or when reclining in a luxuriously cushioned contour, bed-type, chair, or in dim or glaring light, or in a room that has not been ventilated for hours, or even days, except by natural leakage of air.

Concentration on reading depends not on ear plugs but on reading when not tired, when you desire to read, and under other conditions which enable you to concentrate. When unable to secure the reading conditions which you prefer, do the best you can to concentrate under the conditions to which you are subjected. Practice will cause some degree of improvement, even under difficulties.

WHAT ABOUT UNDERLINING, NOTE TAKING, AND PREREADING?

Using a pen or pencil on the pages of a book, as you read, can be a good idea, if you are the owner of the book! With some readers the process of underlining and note taking, while reading, works well and assists them when rereading.

Underlining. Underlining is a screening process. It flags certain parts of the book, article, and the like, for reconsideration. By underlining the combination of words, phrases, and sentences which seem particularly significant to him, the reader can return to the book and review it quickly. Underlining should be done rather sparingly, especially in a book to which the reader expects to give little if any further attention after reading it once. Even in a book which he plans to refer to many times in the future, the underlining should be done with restraint and discrimination.

Underlining can be carried too far. If the reader underlines almost the entire book, why should he underline at all? If the reader does a poor job of singling out significant words, phrases, and sentences for underlining, then he will miss much of value when using the underlining as a means of reviewing what he has read. And why should he consume extra time in underlining by using a ruler, as some do. The underlining is a matter of utility, not one of beauty.

Note Taking. Much can be said in favor of taking notes while reading, if the process does not become detailed, laborious, and inconsequential. Writing a fact or an idea on paper helps to fix it in one's mind. By writing on paper one comes very close to writing on his or her mind. Text and reference books and special reports contain a wealth of information and, therefore, lend themselves to note taking, whereas novels relatively seldom do, except for literary critics.

Notes which are made in the margins and at the top and bottom of the pages or on separate sheets or on cards should be brief and to the point so that proceeding from page to page in the book will not be a tedious and wasteful exercise. The taking of concise notes while reading helps one to think systematically about what he is reading and enables him to review rapidly the meat of the book, or of those parts in which he is interested.

With pen or pencil in hand, the reader is likely to be tempted to jot down his reactions to the author's points of view. He has contact with the author. He can enter into a lively exchange of ideas with the author by reading what he has to say and then expressing personal reactions in the margins of the page. It can be fun to have the last word with the author in this way and to come back years later and read the notes to see if you have changed your mind.

Concise notes summarizing facts and ideas found in a good book, and the reader's reaction to what he is reading, are considered by many to be worth the time required to make and use them. When jotted in the book itself they form a permanent, easy-to-find, and interesting collection.

Rereading. A new book on corporation finance may deserve and receive the most careful reading and then a rereading by a professor of economics but only a scanning by one of his students who is majoring in history. The value of almost any good book, article, or pamphlet to a prospective reader is dependent on his or her immediate interest in it.

When sitting down with a book, the experienced reader can determine quickly whether he should scan it, read it rapidly in part, read it carefully in entirety, or do a combination of these three. As he gets on with the book, he can readily determine to what extent, if any, he should reread it

Rereading, and also rescanning, parts of a good book is a profitable practice. Each time the reader spends time with the book, he finds facts which had escaped him or finds a different meaning in a sentence, paragraph, or chapter than when he read the book previously. A hasty rereading of a chapter before proceeding to the next, especially if one has underlined during the first reading, and a quick scanning of the entire book after reading, helps one acquire a correct over-all understanding of the book. When rereading, it is well to notice once more the pictures, diagrams, and charts which are reproduced in the book, for, if they are well selected, they will bring out many of the high lights at a glance.

EVALUATING THE PRINTED WORD

We are not very well protected from people who write with the idea of putting pressure on us, nor are we well protected from those who write prolifically and in a shoddy fashion. Some so-called popular history and much fiction are paraded as good reading when it definitely is not. Much that is published is not worth reading; much is actually harmful. In a democracy it is fundamental that citizens have the ability to read and to

understand and evaluate what is read so they can determine for themselves the value of the large quantity of uncensored printed matter, including political propaganda, which passes daily before them. Furthermore, it is necessary that they be able to evaluate what they read in order to protect themselves from business ruses, including advertisements, varying from mild deceptions to large swindles.

High schools and colleges should instruct their students to evaluate what they read. Students and out-of-school youth and adults should not believe something just because they see it in print. Thousands of people do this to their sorrow. However, none of us can be specialists in many things. Therefore, we do not have sufficient facts to analyze thoroughly all that we read.

Features such as excellent literary style, or a lively, interesting flow of words, or much footnoting in books and articles, may throw the reader off guard unless he is in the habit of reading analytically, with the thought of searching for true value.

For the following reasons it is necessary that persons, from youth through the remainder of life, evaluate what they read:

- Some writers quote pertinent facts correctly but deliberately or innocently publish in connection with those facts incorrect conclusions.
- Some writers make supposed statements of fact which are not fact, but rather error—deliberate or unintentional.
- Much published material is thrown together hastily to meet a publication date or to fill inexpensive publications for which there is a market of careless readers who do not demand accuracy or quality.
- 4. Much that is published is slanted purposely to influence readers in a particular direction regardless of truth and ethics. Half truths are given in such a way that many readers will accept them as whole truths. Ouoting out of context, by
- quoting a few sentences or parts of sentences in a manner which distorts the meaning of the quoted material, and introducing them with a sentence which further distorts, is a despicable but not an uncommon practice.

One can learn to evaluate what he or she reads by placing emphasis on the following:

- 1. Judge carefully the general tone of publications in which you are interested-for instance, scan a number of issues of a newspaper or magazine or a number of the publications of an organization. In a book seek the writer's point of view. Notice the name of the writer and try to determine the purpose of the book. This determination can be made in part by reading the preface or foreword and checking through the table of contents to get a definite idea as to the over-all plan of the book, and by examining the footnotes or other references. A fairly similar process can be used in scrutinizing a lengthy article. In the published news, look for editorial bias.
- Immediately before reading an article or book, ask, and answer to yourself, what you know about the subject with which it deals.
- Immediately before reading a book, article, or pamphlet on a controversial subject, ask and again answer to yourself: "What are the facts on the side opposite

to that taken by the author? What are the points of controversy?" This process assists the reader to analyze conflicting points of view.

4. Select at random a few bold statements which are given as facts in an article or book, whether or not the subject is controversial, and reflect on the author's implications. Look for reasons behind the statements. Then, if convenient to do so, compare those statements with the views of a recognized authority on the subject and draw your own conclusions.

Analytical reading is one good way to form the habit of thinking. By engaging systematically in the above four analytical practices when reading, a person should be able to evaluate what he or she is reading. Analytical reading will result in supplementing one's store of useful information and from time to time will call for use of the newly acquired information. Analytical reading will also expand powers and habits of analysis until they extend to such things as evaluating the conversations and work performance of other people.

By using these four analytical practices frequently in reading and doing so without becoming suspicious, carpingly critical, and cynical, the individual will obtain much benefit from reading. He or she will be using a scientific process and will be developing a search-for-truth habit rather

than either gullibility or a destructively critical habit.

The person who has the ability to evaluate reasonably well what he reads and does so is free, or at least relatively so, from false opinions and provincialism. He is a free man as contrasted with the person who stops short of evaluating when he reads. The latter is a slave.

Reading should be the path to enlightenment and freedom. Those who accept unquestioningly what they read are in danger of being on the road to ignorance and enslavement. This fact is obvious in many parts of the world. Clever propaganda looks good to people who do not evaluate accurately what they read, but it soon loses its brilliance for those who do.

IMPROVEMENT OF THE MIND

The able reader will do well to reserve some time for reading which broadens considerably his or her horizons. This type of reading, accompanied by pondering, results in improvement of the mind. It centers on printed material that goes beyond day to day reading necessity.

Anyone, great or small, benefits through improvement of the mind. Catherine Drinker Bowen, in her delightful biography of Justice Oliver Wendell Holmes (entitled Yankee from Olympus, Little, Brown and Company) tells of President Franklin D. Roosevelt's visiting Mr. Holmes a few days after the inauguration in 1933. This was at about the time of Mr. Holmes' 92nd birthday. The President found the distinguished and learned Justice of the United States Supreme Court reading Plato. On being asked by the President why he read Plato, Mr. Holmes replied that he was doing so in order to improve his mind. This refreshing incident is given on page 414 of the 1945 printing of the Bowen work.

In order to improve his mind, the individual should do at least a bit of systematic reading on a high level so as to stimulate thinking. Items which are thought-provoking will feed the mind. Those which are barren tend to pass lightly over the mind and leave no impression on it. Some people are eager to have their homes well furnished, others are more interested in having their minds well furnished. Mature people can obtain so very much from reading if they have the desire to do so and have not lost the art of study.

Reading a substantial book a year, in his field or one of the great books of all time, and thinking intently about the contents of the book is a start in the matter of improving the mind through reading. Books which can be used to improve the mind can be found in any public library.

There have been many notable attempts to identify books of the type which will improve the mind-books of outstanding and lasting worth. In 1946 the Jasper Lee Company of New York issued a publication entitled Have You Read 100 Great Books? It contains twenty-five widely known lists of great books, among them the list used by St. John's College at Annapolis, Maryland. A master list of 1,000 titles and a selection of 100 great books are also included. In the list of 100 are found Henry Adams' autobiography (The Education of Henry Adams), Benjamin Franklin's Autobiography, the Bible, Charles Dickens' Pickwick Papers, William James' Principles of Psychology, Thomas Malthus' Principles of Population, Plato's Dialogues, Henry Thoreau's Walden, and Walt Whitman's Leaves of Grass.

The most significant ideas produced down through the centuries are available in print. Most of them are easily accessible to the reader who desires to become familiar with them. They are his almost for the asking if he is willing to prepare his mind for them. This he can do by careful reading of select works and pondering on them. The pondering is a process of agreeing and disagreeing with what he reads and knowing why he agrees or disagrees with any particular book or part of it. Such reading and pondering improves the mind just as appropriate instruction and practice increase the speed of a sprinter.

When reading books of outstanding worth, and improving reading ability, and appreciation for the best books, one will be able to read and enjoy those which previously he considered too difficult. A widely circulated work by Mortimer J. Adler entitled How To Read a Book appeared in 1940. It gives many useful hints to the person desiring to improve his mind through reading.

The reader who, by deliberate and persistent effort, thinks through what the author of a good book says, and weighs the author's point of view on the subject against his own, cannot avoid improving his mind. In going through such process year after year, his mind will absorb many important ideas and begin to generate high-level ideas of its own. A facility with

words will be acquired which will assist him, in turn, to express ideas precisely.

In the spring of the year when college track teams are in training, those men who continue to run after they are tired and who stretch their stride until it hurts soon notice improvement in their running. It is that extra effort which brings improvement. The same is true in matters intellectual. Extra effort, taking the form of more or less systematic reading of books that are above and beyond the level required by one's job and thinking them through, results in improvement of the mind. Conversely, reading less and less taxing books, such as novels only, weakens the power to grasp weighty subjects and enjoy substantial books.

THIS WE SHOULD EXPECT:

That, beyond the years of full-time schooling, the individual will strive to evaluate intelligently what he or she reads and to use reading as an aid in daily accomplishment and in mental development.

That high schools and colleges teach their students to read in such manner that students will understand what they read, will know how to evaluate written material, will form a life-long practice of evaluating what they read, and will want to improve their minds.

The Ability To Express Oneself by Speaking and Writing Is Essential

Clear Thinking Necessary
Conciseness, a Priceless Gem
Well-Chosen Examples
Word Power
What About Use of Visual Media?
Respect for the Listener
Consideration for the Reader

REQUENTLY, a good idea poorly expressed has little possibility of survival. Similarly, a fact pertinent to a matter under consideration may have almost no possibility of attracting the attention which it merits if presented poorly.

The Ability To Express Oneself by Speaking and Writing Is Essential

AVING something of value to say and saying it well indicates ability to express oneself. An oral or written word picture, stated clearly and interestingly, commands attention. It makes a fact or an idea stand out boldly. The person with the ability to express himself well, by speaking and writing, can present facts and ideas in a manner that is comparatively clear and easy to understand. Whether he is explaining a chemical formula to a fellow scientist or the sprouting of seeds to a five-year-old child, he can handle the situation commendably.

Some persons are garrulous. Whether they are speaking or writing, they say little of value. Others are skillful humorists. Still others are expert in selling more than they can deliver. In holding an audience, a typical faker on the boardwalk at Atlantic City, New Jersey, (selling a kitchen gadget or a bottle of hair tonic) can often far outstrip many persons of much education. But the faker sells more than he can or than he intends to deliver.

This chapter deals with ability to express facts and ideas for constructive purposes. The term idea is used broadly in this chapter to include one's mental impressions, particularly those which he has formulated into a definite plan or into a clear-cut opinion after making objective study.

The searching and organizing involved in the process of developing the ability to convey a fact or to interpret an idea are practical forms of education. Many elements contribute to this process—initiative in obtaining data, judgment in sifting and arranging them, initiative in finding existing ideas and in generating new ones, judgment in selecting ideas, discrimination in choosing words to express exactly what is meant, spelling correctly, applying rules of grammar, and forming sentences and checking them for completeness and clarity.

Expressing facts and ideas is a matter which deserves utmost care and development. The ability to express oneself well orally and in writing comes rather largely from continuing practice in which one takes note of defects and attempts to decrease them. It is not uncommon for adults to become almost paralyzed when required to make an oral report before a dozen people. Difficulty is often experienced in reducing the report to writing. Most of us go through trying times before being able to express facts and ideas in a logical manner in front of a group or on paper. One

should develop this two-fold ability reasonably well before leaving fulltime school and ought to continue developing it thereafter so as to avoid laboring under a handicap in a world which needs this ability. However, salesmanship finesse in speaking and a polished literary style of writing are not necessary. Ability to present facts and ideas in a simple and understandable way is sufficient.

CLEAR THINKING NECESSARY

If one does not think clearly how can he consistently express himself clearly? Unless one thinks clearly, the sequence of his spoken and written words, insofar as they are his own and deal with any matter requiring more than a casual comment or an automatic response, will be muddled. If a thing can be thought, it can be thought clearly. If it is thought clearly, it can be expressed clearly in the spoken or written word. In order that important matters may be expressed well in speaking or in writing, the expression needs to be preceded by clear thinking.

To think is to use the brain cells and their energy in a process of comparing and contrasting. When placing a finger on a hot stove by accident and removing it immediately, the removal is the result of an involuntary reflex rather than the result of deliberate thinking.

In cases when instantaneous action must be taken in order to save life, avoid injury, or avoid creating a serious misunderstanding, automatic responses are superior to deliberate thinking. In a far larger number of situations the acting on impulse and the speaking or writing without taking time to do clear thinking cause a waste of time or even serious harm.

Thinking involves many operations which philosophers down through the centuries, and, more recently, psychologists, have expounded upon. Thought, the product of thinking, consists of concentration in order to compare and contrast. In order to think, a matter is brought under consideration. It is reflected upon (considered, cogitated) so that personal satisfaction can be obtained. Sometimes this personal satisfaction requires that a conclusion be reached. Particularly when a conclusion is reached as a result of thinking, there is a reasoning before acting, an exercise of powers of judgment.

To a large extent thinking is a problem-solving activity. One who thinks about a particular problem delays his conclusions until he has considered different possible courses of action, instead of making a snap decision. But in thinking before speaking and writing, one should avoid doing so much intellectual exercising of a sort as to quibble and accomplish nothing. A principal purpose of thinking is to arrive at conclusions rather than to get on and stay on a treadmill and go around and around.

We all think. We cannot avoid doing so. John Locke in his Essay Concerning Understanding, ii, 1690, said "A waking man, being under the necessity of having some ideas constantly in his mind, is not at liberty to think or not to think." The point of concern is that an individual develop

the habit of clear rather than hazy thinking and that he direct his think-

ing to constructive purpose.

Even though a person of approximately average intelligence, and in good health, cannot escape doing some thinking, many people do comparatively little thinking of a type requiring effort and intellectual skill. Mary Wollstonecraft put it succinctly. In her A Vindication of the Rights of Woman, ix, 1792 she wrote, "If the power of reflecting on the past, and darting the keen eye of contemplation into futurity, be the grand privilege of man, it must be granted that some people enjoy this prerogative in a very limited degree."

Clear thinking ought to precede speaking or writing. When expressing oneself on a subject very familiar to him, little time may be necessary for thinking. Extemporaneous speaking and dictating for publishing without revision may then be appropriate. When expressing oneself on a matter less familiar to one, the situation is different. The matter should be thought through. The individual should analyze the statements he plans to make orally or in writing to see if they make sense. When a few searching questions are applied to what you plan to say or write and you determine how well the statements stand up in the face of those questions, and how the statements should be revised, you are well on the way to clear thinking. Objective thinking is clear thinking, biased thinking is not. The practice of examining what you plan to say orally or in writing to see if you have been objective rather than biased is an excellent practice. Especially, it is a safe rule for an individual to look for defects in any plan or program about which he is enthusiastic. This should be done to determine whether or not the plan or program is worth supporting enthusiastically and to find how it can be improved, if generally sound. After searching for defects in either a plan or a program, one can put his thoughts in order and be in position to speak or write about it.

Before you engage in an interview, it is wise to think clearly as to your point of view concerning the subject to be discussed, unless the interview is of a routine nature. In handling correspondence, thought ought to be given to an important letter before writing and mailing the reply. In many instances, a few hasty words spoken or written without first thinking the situation through clearly will confuse rather than clarify. When

confusion results, a lack of ability to express oneself is shown.

Informal talks and rather formal speeches, each serving as more than entertainment, should grow out of clear thinking rather than out of thin air. The informal talk or the formal address that explains to an audience a policy, a procedure, a program, or an individual's point of view and does so in a logical sequence of understandable remarks is evidence of clear thinking. A person who speaks to a group without giving more than casual thought to his subject prior to appearing before his audience must be able to think quickly and clearly on his feet and express himself well in order to rise to the occasion. But if the subject is too big for him to

think through clearly while in front of the group, his presentation is not likely to be effective. A few in the group may pick up the subject and think it through for themselves; others will be confused or give the subject little attention. It is altogether possible that the speaker will be considered by some members of the audience, and rightfully so, as a fuzzy thinker or a "washout."

Of course, clear thinking of a precise type need not precede or accompany all speaking and writing. Light conversation of a relaxing nature, with one who knows many of your points of view, and a friendly, chatty, letter to an intimate friend or to a member of the family can be reasonably entertaining and informative without being preceded or accompanied by a deliberate effort to think clearly about such conversations and letter writing. Nevertheless, the habit of making conscious effort to think clearly before speaking and writing about important matters will almost unconsciously keep even light conversation and chatty letter writing from becoming chaotic.

CONCISENESS, A PRICELESS GEM

The person who is concise expresses much in few words. Conciseness in speaking or in writing requires brevity and compactness. Each topic dealt with concisely is handled in clear-cut manner so as to avoid ambiguity. There is no place for verbosity. The superfluous is deleted. Even so, a concise explanation can be comprehensive. Conciseness does not necessarily imply brevity to the point of curtness. Nor does conciseness preclude the use of selected pertinent details. Almost any article in a good encyclopedia is concise and yet comprehensive. A good encyclopedia itself, even though extending into twenty or more volumes, is concise.

How much of value there is in a selected proverb and in choice sentences from great writings! Many parts of the Bible are good examples of conciseness, for instance, the ten commandments, found in the twentieth chapter of Exodus. The sixth commandment recites, "Thou shalt not kill." It is concise—to the point and self-explanatory. And look at verses 37-40 of the twenty-second chapter of Matthew. In those verses Jesus made the following concise reply to a lawyer who was tempting him by asking which was the great commandment in the law:

- 37. Jesus said unto him, Thou shalt love the Lord thy God with all thy heart, and with all thy soul, and with all thy mind.
- 38. This is the first and great commandment.
- 39. And the second is like unto it. Thou shalt love thy neighbor as thyself.
- 40. On these two commandments hang all the law and the prophets.

How much these few words recorded by St. Matthew contain! How compact and clear-cut!

Seneca, a Roman stoic philosopher who died in A.D. 65 said "Gold is tried by fire, brave men by adversity." What a remarkable example of conciseness! Robert Browning, in his Paracelsus, 1835, gives a concise

description of humanity. He gives it in one sentence! It is as follows: "Love, hope, fear, faith—these make humanity; These are its sign and note and character." Lincoln's Gettsburg Address, made on November 19, 1863, is a concise statement of three paragraphs indicating the nature of democratic government and the fact that democratic government must survive.

Conciseness requires one to "say something" when speaking or writing. It requires that one put facts and ideas into what is being said rather than proceed with a patter of idle words. One should make a habit of coming

to the point without using a smoke screen.

To define a word occasionally is good practice in conciseness. Defining requires one to get to the point immediately. To study a few of your favorite one-sentence quotations taken from well-known authors, to analyze those quotations as to conciseness, and to try to write several statements which each express your own thoughts with a conciseness almost equal to the favorite quotations, may assist you in eliminating wordiness and rambling.

A typical recipe is concise indeed. The following is characteristic of entries in a cook book. It is a recipe from one of the best of cook books, Irma S. Rombauer's *The Joy of Cooking*, published by Bobbs-Merrill Com-

pany over a period of approximately twenty years.

Spinach Au Gratin

Place on an oven-proof dish:

Canned or cooked drained spinach

Spread it in a thin layer. Cover it with:

Grated cheese

Season it with:

Paprika

Salt

A few grains of cavenne

Pour over it:

2 or 3 tablespoons cream

Broil it until the cheese is melted.

Conciseness may produce a bony structure which needs supplementing. If one is not concise, either the listener or the reader may fail to see the point or may not try to see it. If one is overly concise in speaking and writing, the listener and reader can, and frequently will, ask for more,

as at least bare bones will be in evidence.

Conciseness can be achieved through outlining material before presenting it orally. If an outline is made prior to a short oral presentation of an idea or of a plan, or before making a speech from notes (rather than by reading a script), the presentation or speech is likely to get to the point quickly. After making an outline, it may need working over for improvement. Headings which do not relate to the idea, plan, or speech and subheadings not related to the headings under which they are placed should be stricken out. After making such deletions it should be determined

whether or not all of the remaining headings and subheadings are necessary in order to express what you want to emphasize.

If the presentation is to be made several weeks hence rather than almost immediately, it is well to outline on paper now what you plan to say. Look at the outline every day or two and jot down revisions which you believe will improve the sequence of points included and which will make each stand out plainly in the listener's mind.

When writing a letter, article, or report, and the like, outlining and critical review will assist in achieving conciseness. If the piece at hand is of particular importance, rewrite it in whole or part for sake of compactness. Doing so will eliminate meaningless words and wandering from the central theme.

In writing, as in outlining an oral presentation, there is value in living with the task. To write something, to lay it aside, and to rewrite it is a good habit on work which you regard as deserving special attention, if it need not be submitted immediately, and if it is not laid aside indefinitely! Rewriting in the interest of conciseness is a good procedure which after a time decreases the need for such rewriting. The type of self-discipline involved in outlining oral presentations and in the critical review of material being written for circulation will show significant improvement in one's ability to be concise.

WELL-CHOSEN EXAMPLES

To grasp consistently on first exposure the meaning of facts and ideas requires a great deal of abstract-mindedness. This quality is possessed in large measure by comparatively few persons. Notable among them was the late Albert Einstein.

A considerable percentage of individuals in almost any group of adults needs to have facts and ideas spelled out in a bit of detail in order to understand them. The use of well-chosen examples when speaking or writing assists the one on the receiving end to understand the facts and ideas being presented. The examples help to center attention on and to clarify what is being presented. The use of well-chosen examples complements rather than destroys conciseness.

In speaking or in writing, one frequently desires to make a striking remark or to write a sentence which will have much weight. Bolstering such a remark or sentence with a well-chosen example can change it from a vague generality to a remark or sentence which carries value to the listener or reader. The often-repeated notion that the younger generation is going to the dogs is only a vague generality when standing by itself. Therefore, it is almost meaningless. It does not explain who the younger generation is, why it is going to the dogs, or in fact to what dogs! A glowing eulogy to a program is little more than tinsel unless a few well-chosen examples of accomplishment are cited.

Examples which can be used advantageously when expressing oneself by speaking and writing fall into two large categories. The one category consists of examples which are rather general but which illustrate a principle. The parables of Jesus and many of the stories by Abraham Lincoln contain examples of this kind. In the other category are examples which are very specific, such as a pertinent case study.

To make the simple, yet profound, remark that workers should not only be told what to do but the reason why, is not sufficient for most people. However, when the remark is accompanied by a general type of example, like the following overdrawn one, the remark will be understood by most people to whom it is directed.

A railroad president was making an inspection, traveling in his official car. One day when the car was pulled into a station, he went on the back platform in order to get a bit of fresh air. While on the platform, he noticed an elderly man tapping with a hammer each wheel of the car. After offering a few friendly greetings to the worker, the president asked him if he tapped each wheel of every passenger railroad car arriving at the station. Upon the worker's affirmative reply the president asked him why he did so. The worker said that he had been doing this task for forty years because of being told to do so and that he, too, had been wondering why the wheels should be tapped.

Almost everywhere in America, people are performing routine tasks every day without knowing why. When they know the reason for performing a task, they are inclined to perform it better than when they do not know the reason. Even so, the simple remark that workers should not only be told what to do but the reason why, will be understood by a larger proportion of people when that remark is illustrated with a pertinent example than when none is given.

Upon finding that morale among workers is becoming low and the number of resignations is increasing sharply because of the way in which foremen in a plant are reprimanding the workers, it is high time to assemble the foremen and give them instructions concerning methods of reprimanding. It is then helpful to tell the foremen a few simple principles of reprimanding, such as:

- 1. Before reprimanding, be certain that the reprimand is deserved-get the facts.
- 2. Do the reprimanding in private and in a cool rather than in a heated manner.
- 3. Come to the point with courage-talk straight rather than beat around the bush.
- 4. Build rather than destroy-show the employee how he can improve.

But merely to mention these principals is not enough. By relating in as much detail as necessary an actual case in which the reprimand was handled badly and another in which it was handled effectively, the four principles will be more than a skeleton. They will be a well-rounded and understandable guide for each foreman to follow in reprimanding workers who have fallen down on the job. Well-chosen examples pin-point the facts or ideas being expressed so that they will be noticed, and illustrate them so that they will be understood.

Examples which are based on the experience of the listener or reader are likely to attract his attention and enable him to grasp the meaning which is being expressed. In speaking of lost sheep, mustard seeds, tares among wheat, and the begger at the Temple, Jesus was speaking of things which were as familiar to his listeners as a traffic light at a street intersection, a 1956 Ford, Chevrolet, or Plymouth automobile, and a diesel locomotive are to people in the United States today. Choosing examples based on the experience of those to whom directed, and examples which are pertinent to the subject at hand, exhibits one's ability to express facts and ideas.

WORD POWER

The words one uses and the way in which they are used denote a narrow or a broad mind, shallowness or depth of thinking. Watch your words. They are noticeable to others. Shakespeare said "Mend your speech a little, lest it may mar your fortunes." Ben Jonson said "Language most shows a man; speak, that I may see thee."

There is a power in the knowledge of words. Word power, the knowledge and skillful use of words, in addition to clear thinking and conciseness, is an important tool. It is a substantial element in success. Particularly is this true in positions of leadership. With word power, improvement is made in the ability to express oneself by speaking and writing. Tests have proved that there is a close correlation between word power and earning ability. Knowing the exact meaning of words is of great assistance in conveying facts and ideas. Knowledge of words is an important factor in intelligence testing, as people think in words. Furthermore, word power gives one a feeling of confidence and poise.

In speaking or in writing, a few well-chosen words can express a fact or an idea effectively when a long, carefully prepared discourse may not. To express great facts and ideas in simple, familiar words is the test of word power. Generally the words and phrases which command the most attention are those which are simple and familiar, but no harm is done by injecting unusual words which are precise and self-explanatory in the setting in which they are used.

Synonyms are needed for overworked words such a "very" and "awfully." In order to state a fact or an idea concisely and exactly, an ample vocabulary is required. The hearing and reading vocabulary of most people is rather large in comparsion with their speaking and writing vocabulary. Ideas, therefore, should not be imprisoned within the confines of a small vocabulary. Words chosen with preciseness are likely to be understood by the listener and reader. There are two reasons for this. When a person listens or reads, he comes in contact with many words whose meaning is familiar to him though they are words which he does not use in speaking or writing. He also may sense the meaning of words unfamiliar to him through the way they are used. On the other hand, the

flashing of large words for the sake of making an impression may leave a neutral or a negative one.

If your speaking and writing vocabulary is small, your ability to express yourself by speaking and writing may be cramped. Try to use more of the words which are in your hearing and reading vocabulary but which are not in your speaking and writing vocabulary. The value of a vocabulary is that it gives one a choice of words with which to express oneself. If a person does not use that power of choice in expressing himself, so as to choose the best words to convey his meaning, he fails to seize benefits which are within his reach. When you want to express a fact or an idea and cannot quite find the right word immediately, try again. Such practice is excellent intellectual exercise and develops word power surprisingly. Finding just the right word to express an idea provides real satisfaction, somewhat like finding again an old friend, or locating a new book about which your curiosity had been aroused.

In speaking, and particularly in writing, when you think you have found the right word, you may find a still better one to express yourself if you search further! When a word that almost fits the occasion does not

seem to have a substitute, then it is exactly the word to use.

Word selection is important and frequently is overlooked. Many words are full of life, some especially so, such as vibrant, vital, gleam, sparkle, and scintillate. In expressing facts and ideas, one does well to make use of the life that words possess. Word selection should be stressed from elementary grades. After the years of full-time school, a person still profits from being on the lookout for words which are new to him and ways to use them so that he can claim them as his very own. An individual can get to know the particular meaning of many words by learning and using them one at a time.

Word selection of a careful sort leads to word power. Vocabulary exactness results mainly from study. One can look in great literature for an excellent selection of words. Consulting the dictionary or a book of synonyms, often, when writing, will help enlarge one's exact knowledge of words. Such enlargement increases one's ease and effectiveness of expression. Looking in the first few pages of the dictionary one finds such interesting words as abash, abject, abjure, and ablution. These are short words. When employed properly they are potent.

A good dictionary can be used to find the meaning and derivation of words which especially interest you. It gives a great deal of information such as pronunciation of the word, spelling of the word in its various uses, its synonyms and antonyms, and the like. An unabridged dictionary gives a large amount of explanation concerning the distinction in meaning

between the word and its synonyms.

Write down a word familiar to you and then write as many of its synonyms as you can. Check with a good dictionary to see how nearly correct you were in listing each. Next, try to list antonyms for the same word and check on yourself by consulting the dictionary. Listing words on paper when learning their meaning and reviewing such lists helps fix words in the mind and helps incorporate them in your speaking and writing vocabulary.

A quick but not entirely satisfactory way to increase speaking and writing vocabulary is to study selected lists of words in order to learn the meaning and pronunciation of each. Lists containing words of general usage, and lists pertaining to specific fields of work, for instance to engineering, agriculture, or business administration, are available. Using popular tests of vocabulary, such as those found in the Reader's Digest, is a

means of increasing word power.

A book by Norman Lewis entitled Word Power Made Easy, published by Doubleday and Company, New York, in 1949, gives a number of suggestions concerning vocabulary enlargement, so as to prepare the reader to talk about personality types, science and scientists, everyday attitudes, complicated ideas, and the like. The book includes numerous vocabulary tests which the reader can use to determine his progress in building word power. The book is helpful to those who want to increase their vocabulary, but the title is deceiving. The development of word power is not an easy matter.

Wonders can be worked through exact but unostentatious use of words. People grasp quickly facts and ideas which are stated in simple, specific, vivid words. On one of his visits to New York, Winston Churchill, well known for his word power, spoke of the climate of the United States as "Your more indulgent climate." Many poets, too, have facility in the use of words. Can anyone fail to catch Byron's word picture in the following four lines?

The Wind moans in the Wood, The Leaf drops from the Tree;

The cold Rain falls on the graves of the Good,

The cold Mist comes up from the Sea.

These words of Churchill's and Byron's are familiar words, but they are used with an astonishing preciseness and charm. One grasps immediately the British Prime Minister's meaning in his comment on the climate of the United States as contrasted with England's. Likewise, after reading Byron's four lines one can almost hear the wind moan in the woodland, and the leaf drop from the tree. In prose or in poetry, word power polishes facts and ideas to the point where they command attention.

Every word in the dictionary is valuable when used properly. Almost any word can be used incongruously. Increasing one's word power is an

endless challenge. It is hard work, and worth it.

WHAT ABOUT USE OF VISUAL MEDIA?

Occasionally when speaking or writing, it is well to use visual media which are readily at hand, such as a small chart when in conversation and a wall-size chart when making a formal talk before an audience of approximately fifteen or more persons. However, one should not depend on visual media in order to express facts and ideas. Leaning heavily on visual media destroys one's ability to express himself well in words, when speaking and also when writing. If Demosthenes, the Athenian orator who lived in the fourth century B.C., and Daniel Webster of nineteenth century America had had color transparencies, motion picture films, cut-away working models, and other modern types of visual media at their disposal, the names of Demosthenes and Daniel Webster might be unfamiliar to us.

In conversation and in conference, and to a lesser extent before a large audience, an individual can show a new tool or other object about which he is speaking. He can also demonstrate how the object is used. Having the object at hand will assist almost anyone to express to the listener facts and ideas about it. If the object is of size and weight that make it easy to carry, there may be few problems involved in its use as a visual

aid in speaking.

Charts, photographs, line drawings, and cartoons that are both simple and pertinent have a place in oral and written expression. If visual media are used to supplement what is to be said rather than used as a crutch, they can sharpen one's power of expression.

RESPECT FOR THE LISTENER

Individuals and groups are generally willing to listen to a person who has respect for them. By looking at the listener, by being considerate of his time, by not being haughty to him, by being relaxed, yet using appropriate enthusiasm in speaking, and by talking to him on his own level and without becoming cheap, or humiliating him, one can usually gain the respect as well as the attention of the listener. The person who shows respect for the listener usually shows some ability to express himself by speaking. He can generally hold another without handcuffing him to a stationary object or without locking a door to prevent his escape.

In conversations or in conferences—and also when speaking before a large group of people—impetuousness, excessive loudness, desk pounding, and either a demanding or a gloating manner, or egotism are signs of emotional immaturity, disrespect for the listener, and, therefore, deficiency in ability to express oneself by speaking. Naturalness and a spirit of sincerity when speaking are marks of respect for the listener. Exaggeration and other forms of straying from the truth can soon become annoying.

The use of malicious personal insinuation, profanity, or lewdness are in bad taste even though somewhat common. In conversation as well as in conference and public speaking, they should be avoided. This is a matter

of self-respect as much as one of respect for the listener.

No matter to whom one is speaking, a feeling of conviction ought to be put into the words which are used to express facts and ideas. The listener deserves a modulating of voice occasionally rather than a steady oozing of words, regardless of how sincere they may be. In conversation with one person it is a matter of respect to maintain a two-way relationship—to listen to him as well as talk to him. In a conference with several persons, riding roughshod over others shows a lack of

respect for the listener.

The person who holds a busy man by the coat lapel so that a long tale of woe can be told before the other can escape is inconsiderate of the listener's time. Insulting an individual when attempting to converse with him or berating an audience when making a speech are not ways of showing respect for the listener or of winning his continued attention. The speaker on a platform who looks at the ceiling or out of the window during most of the time while making a speech has little contact with his audience. He leaves the impression that he has forgotten it and that he is not attempting the contact with the special contact with the special contact with the property of the contact with the contact with the contact with the contact with the property of the contact with the property of the contact with the

ing to win its respect.

Controlling oneself to the extent of being relaxed rather than tense when speaking to an individual or to a group can be a matter of respect for the listener. How have you reacted to a person who waves a fist at you and threatens to use it on your nose? Have you ever been disturbed by a speaker on a platform who paced back and forth nervously, waved a hand frantically and more or less continuously, had objectionable facial mannerisms, or acted like a madman? Yet, what is so dull as listening to a colorless person, one who completely lacks enthusiasm? Have you waited impatiently in the hope of soon getting away from a person who was droning on and on, or from one who had a high pitched, irritating voice? Calmness, interspersed with proper bursts of enthusiasm, and a voice that is tireless to the ear rather than tiring are assets when holding a conversation with an individual or when participating in a conference with several persons, or when making a scheduled talk to an audience of approximately fifteen or more people. The use of such assets shows respect for those to whom one is speaking.

Using words and phrases which are understood by the listener, and which are used without attempt to belittle him, is a courtesy which he deserves in conversation and in hearing addresses from the platform—unless he is out of place, as a near-illiterate would be if attending a lecture on physical chemistry. The use of empty phrases, or "talking down" to the listener, indicates a lack of respect for him. Unless the listener is respected, he is not likely to continue giving attention to what is said, in a conversa-

tion, in a conference, or in a speech.

CONSIDERATION FOR THE READER

Doing a careful job of writing a letter, a memorandum, a report, an article, and the like is a matter of rigorous self-discipline. Preparing an outline and following it, especially when doing a piece of writing which is of considerable importance, is a good habit, as mentioned previously, and is one which the reader appreciates. Outlining is a necessary vehicle in transmitting clear thinking and conciseness to the reader. One should not hesitate to let the outline protrude so plainly that the reader can see it,

particularly in report writing. In being able to see the outline sticking through what has been written, the reader grasps the meaning more quickly and correctly than otherwise. The listing of objects and conclusions in 1, 2, 3 order saves the reader's time and assures the writer that the objectives and conclusions are reasonably certain to be noticed. Yet, it is well to remember that a protruding outline, like a human skelton, is not particularly attractive and that an outline can be protruded excessively in a talk, an essay, or a report.

The reader deserves to know the sources on which the material he reads is based. Frequently they can be woven into the text, and in a narrative fashion which does not jar. Footnotes can become a fetish. There is a widespread feeling that the use of many and detailed footnotes symbolizes erudition. In most forms of writing, it is well to go light on footnotes, and to put in only those which seem appropriate for the readers to which the writing is directed. If one uses quotations and fails to check them for accuracy in all respects or if one cites sources from memory or on the basis of another person's recommendation and does not examine them before transmitting to others in what he is writing, he is failing to show consideration for the reader.

Presenting a prejudiced viewpoint in a subtle rather than in an honest way, too, is unfair to the reader. If the reader cannot depend on what he is reading, he has not been given adequate consideration, regardless of how excellent a literary style has been provided.

Use of short and clear rather than of long and involved sentences is also a courtesy which the reader deserves. Obscuring the important by including extraneous material shows lack of consideration for the reader as well

as lack of clear thinking and conciseness.

Long paragraphs have a deadening effect. The writings of John Ruskin are worth a great deal of study. Some of them would have been more-interesting, however, had he shortened his paragraphs markedly. In most instances this could probably have been done by slight rearrangement and only minor rewording. The person who attempts to see his own writings from the point of view of the prospective reader realizes the need of frequent paragraphing. Nevertheless, an emphasis on one and two sentence paragraphs may not be sound, for a paragraph should be a complete unit.

Consideration for the reader requires that one examine carefully what he writes to see that it will receive any revision necessary to make it worthy of the reader's attention. Especially is this the case if many copies of the

material are to be circulated.

In conversation, conference, and speech-making, one must depend in the main on leaving a general impression so that, after the sound of one's words die out, the impression will remain on the listener. In writing, one provides a record of facts and ideas expressed so that they can be consulted in the future. Therefore, in writing one must be reasonably exact (more so than in speaking) in order to be considerate of the reader. A written presentation is a more permanent sort of thing than an oral presentation and, consequently, must be more accurate.

Many a speech is effective because of the way in which it is given. The same is true of remarks made at time of an interview or a conference. A stenographic record of a successful speech, interview, or conference, even when edited so as to improve the grammar, may be of little value. What was said may lack punch and may also lack clarity when examined on paper. The grin and the gesture which were so effective in emphasizing a point when making the speech or when participating in the interview or conference just do not show up for the reader. Henry Ward Beecher (1813-1887) and Russell Conwell (1843-1925) were known across the land for their remarkable ability to draw and captivate large audiences. Nevertheless, in print, many of their sermons are rather superficial, and some are a bit anemic.

Under many conditions, writing needs to be more precise than speaking. When a speech (or other remarks) is to be printed, the person who wrote it should examine it in typescript or in longhand before publication to see if it is worth the attention of prospective readers. If the speech is of doubtful value, due to lack of depth or clarity, plans for publication should be cancelled or the speech should be rewritten in such a way as to convey substantial value. Those who express themselves ably by writing are considerate of the reader's time and of his problem in grasping material which is reaching him for the first time.

THIS WE SHOULD EXPECT:

That after the years of full-time school, men and women will strive to develop the habit of thinking clearly, being concise, and building vocabulary, with the aim of expressing themselves effectively by speaking and writing. This will require them to choose appropriate words to express facts and ideas, to pronounce and spell words correctly, and to express thoughts in a logical order whether speaking to one person or to a group or whether writing a letter, report, or article.

Safeguarding Life and Health

Safety Consciousness

Occupational Hazards

Personal Sanitation

Germ Consciousness

Observation as a Factor in Health

Siamese Twins

Concern for and Information About Public Health

LIFE is one's greatest possession, health is a close second. What is more important than safeguarding life and health? The public safety and health can scarcely be maintained at a high level unless the individual attempts intelligently to maintain his or her own safety and health.

Safeguarding Life and Health

F LIFE is snuffed out through reckless driving or through other kinds of carelessness, like that famous egg, Humpty Dumpty, all the king's horses and all the king's men cannot put it together again. The teaching of facts concerning health has long been recognized as an obligation of the schools, and in recent years an emphasis concerning safety has been noticeable in many schools. Beyond the classroom, safety engineers have done much in the last twenty-five years to meet successfully the hazards of machine-powered manufacturing on a large scale and high-speed transportation. The most progressive industrial organizations in the United States, such as E. I. duPont de Nemours and Company, Inc., have a negligible accident rate due to extensive effort to eliminate safety hazards on the job and to develop safe habits of work. Yet, in numerous business establishments there is inadequate protection for the worker. Throughout the United States millions of people are faced with many safety hazards at home, at work, and during the hours spent elsewhere. Frequently people are not aware of these hazards or disregard them until too late. Learning safety rules by accident is costly.

Health is a condition of physical and mental soundness, a freedom from prolonged illness. Hygiene is the science of preserving health. Both physical and mental health affect one's attitudes and efficiency. It is not

unusual for health and success to be partners.

Health is a day-to-day affair and may be exceedingly difficult to regain once it has slipped badly. Education and material wealth may take on avery dull hue for the person who has lost his or her health. If physical or mental health fails and does not return, one may have little that is of real value.

Seeking magic tonics on pharmaceutical shelves with the zeal of Sir Galahad in his quest of the Holy Grail is not the best way in which to find or maintain balanced health. Enough is known about causes, symptoms, and treatment of disease, that one need not live in fear of illness, although many difficult questions concerning health still lack a satisfactory answer. Nevertheless, drifting into bad health helps no one and can usually be avoided. Health problems, both personal and public, can now be faced with intelligence.

SAFETY CONSCIOUSNESS

Accidents and fires are largely the result of carelessness. They cause suffering, temporary or permanent crippling, and death. Motor vehicle accidents, falls, fire burns and other injuries associated with fires, drown-

ings, railroad accidents, firearms, poison gases, and solid or liquid poisons each account for many unintentional deaths annually.

The National Safety Council, located in Chicago, does much to develop in people a safety consciousness. The Council does this partly through disseminating information about the number and types of accidents occurring in the United States. In its 1955 edition of Accident Facts the statement is made that there were 90,000 accidental deaths and 9,050,000 injuries in 1954. Page 3 of that publication gives an itemized summary of principal classes of accidents, including those which resulted in death.

The protection of life begins with the individual. When he acquires safety consciousness, he is likely to safeguard rather than jeopardize life. Safety consciousness is an awareness of danger to life, and to limb, and how to avoid such danger. As a result of safety consciousness, one notices accident and fire hazards, indoors and outdoors. Flimsy construction, heaps of inflammable material in an area where it could cause a conflagration, unsafe equipment, and unsafe procedures soon attract the eye of one who has developed a safety consciousness.

Through safety consciousness on the part of a large percentage of the adult population, the nation's accident rate and number of fires can be reduced steadily. Today prevention of accidents and fires is largely a matter of human relations rather than one of engineering. Safety devices on machinery and fireproofing in construction are widespread. Yet in the United States almost ten million persons are injured annually to the extent of permanent or temporary total disability and nearly 100,000 are killed as a result of accidents and fires.

Automobile accidents and accidents in the home comprise an enormous threat to human life in America. Page 3 of Accident Facts, referred to above, shows that motor-vehicle accidents caused the death of 36,000 persons and injured 1,250,000 persons in 1954 and that home accidents caused the death of 27,500 persons and injured 4,100,000 in the same year. Only through developing safety consciousness can it be expected that this heavy toll of motor-vehicle and home accidents (and death or injury by almost any other type of accident) will be decreased to a great extent. A mature man or woman with a reasonable amount of stability and with approximately average intelligence can develop a safety consciousness in any of a number of ways. Four are suggested here.

1. Use your minor accidents as immunization against severe accidents. Many small accidents do not seem dangerous until you have a bit of first-hand experience with them. One can capitalize on his own small accidents—slipping on a wet floor, tripping from the bottom step, and the like. The accidents can be used as sort of a vaccination in developing an immunity to carelessness to an extent which may result in a severe injury, or death. Used in this way a minor burn, a flaming waste basket in a kitchen, bedroom, or office, or a campfire that gets out of hand for a few minutes, sticks with one for an astounding length of time and makes one

safety conscious. After being burned painfully but not dangerously on a hot stove, the person who uses his minor accident as immunity against severe ones will ever avoid placing his bare hand on the part of a stove that becomes hot, until he is definitely certain that it has cooled.

2. Occasionally analyze your own actions from the standpoint of safety. How do you cross a busy street on foot, at the intersection and with the traffic light, or in the middle of the block? Have you driven an automobile too rapidly on a slippery road or after dark? What might have happened had you slipped when you stood on tip toes on the top of a tall stepladder in order to replace an electric light bulb in a fixture in a room or corridor having a high ceiling? Analyzing what you do to see how safe you work and play and move about will soon produce a safety consciousness.

3. Occasionally analyze newspaper accounts of accidents and fires and attempt to determine how the accidents or fires could have been prevented. A scanning of the public prints for any week yields information concerning lacerations, fractures, poisonings, and burns which could have been avoided easily. By realizing the severity of these accidents, and by attempting to determine how they could have been avoided, a person who is mature, stable, and intelligent in reasonable degree almost automatically builds a safety consciousness.

4. Reflect on safety posters which can be seen in many manufacturing plants, repair shops, and railroad stations. A considerable number of safety posters are so simple and direct that their combination picture and word message is caught at first glance. When reflected on, at least briefly, rather than forgotten at once, safety posters build safety consciousness.

OCCUPATIONAL HAZARDS

An adult should be aware of the possibility of accident and health hazards on various jobs. In the face of many laws designed to protect the life and health of workers and much genuine concern for their welfare on the part of numerous employers, occupational hazards to life and health are still common in the United States. The gruesome twins, occupational accident and health hazards, are found on all too many jobs. The March 1952 issue of Safety Standards, published monthly by the United States Department of Labor in the interest of industrial safety, contained an editorial entitled "The Long Shadow." The editorial closed with the following significant paragraph: "The long shadow of our machine and chemical civilization still blights the lives of too many. But that civilization also has developed the techniques of safety, by which we can protect ourselves."

Each year approximately one out of every forty employees in the United States is injured to such extent that at least a day is lost from work. An article entitled "Preliminary Estimate of Work Injuries in 1954" was printed in the April 1955 issue of the United States Labor Department's Monthly Labor Review. The article estimated there were 1,860,000 dis-

abled work injuries, and 14,000 fatalities. These figures refer to employees and to the self-employed, except domestic service. The article points to an estimated 390,000 disabling work injuries in manufacturing, 310,000 in agriculture, and 205,000 in contract construction. It makes the following statement on page 430.

No accurate estimate of the total losses resulting from these injuries is possible. However, the total man-days of disability accruing during the year because of injuries which occurred in 1954 amounted to approximately 38,000,000. The economic losses arising from the deaths and permanent impairments, however, will extend into the future for the duration of the normal work-life expectancy of the injured persons. When allowance is made for this future loss, the ultimate total for injuries which occurred in 1954 will amount to about 190,000,000 man-days of disability.

In addition to man-days lost by workers who are injured, there are suffering and medical expense. There are also hidden costs, such as those resulting from workers stopping work at time someone is injured, and cost of training of a replacement and investigating the accident. Much yet needs to be done to eliminate accidents on the job in the United States. An adequate attempt on the part of management to wipe out accident hazards by installing necessary equipment, facilities, and procedures, and an adequate attempt on the part of employees to wipe out carelessness on their part will eliminate much needless suffering and the shortening of life for American workers.

Referring again to the National Safety Council's Accident Facts, 1955 edition, it is seen on page 30 of that publication that twenty-two per cent of recent occupational accidents resulted from the handling of objects. Seventeen per cent were caused by falls, sixteen per cent by machinery, thirteen per cent by falling objects, seven per cent by hand tools, another seven per cent by vehicles, and the remaining eighteen per cent by other causes. In addition to claiming many lives each year, occupational accidents in the United States also injure or destroy large numbers of fingers, thumbs, hands, arms, toes, feet, legs, eyes, and other parts of the body of workers who survive accidents.

As in the case of accident hazards, since the beginning of the present century numerous occupational health hazards have been removed. Some have persisted. As new manufacturing and other productive and service processes have been introduced, new hazards to the health of workers have appeared. Mid-twentieth century is still fraught with a considerable number of occupational health hazards. Most of these can be arranged in four groups on the basis of their cause, as follows:

- Infections such as anthrax ("woolsorter's disease") which endangers those who
 handle wool or hides
- 2. Special air conditions causing "caisson disease" and other serious disturbances
- Dust which causes silicosis and somewhat similar types of injury to the lungs of stone cutters, miners, and metal grinders
- 4. Poisons-a long list including aniline dyes, arsenic compounds, and zinc chloride.

A great amount of noise on the job, poor lighting, much dust, poisonous gases, improper ventilation, and unsanitary surroundings cause fatigue, accidents, and disease. Reducing the amount of noise within reason and providing lighting, ventilation, and sanitation of such quality as to furnish proper conditions for sustained indoor work decrease the number and severity of occupational accident and health hazards.

When recognizing either an accident or a health hazard on his job, the worker should find how to protect himself from the hazard. The person who is aware of occupational hazards in his own work can find ways to reduce them by the manner in which he does his job. As a result of observation and thinking, he should be able to show management a practical plan for reducing at least some of those accident and health hazards over which he has no control.

PERSONAL SANITATION

Personal sanitation is simply a matter of personal cleanliness. As used here the term deals with sanitary habits of one's person. Cleanliness of mouth, nostrils, ears, hair, and of all parts of the body which can be bathed often is a part of personal sanitation. Included also are frequent laundering of all washable items of clothing worn, and such practices as washing hands before eating.

Those who emphasize personal sanitation find that it assists them to function efficiently. They generally make a good personal appearance, which is an asset. This type of hygiene promotes self-respect. At the same time it decreases the rate of serious ailments. Personal sanitation is, in fact, a first step in physical and mental health. The person who brushes his or her teeth daily, or, better still, after each meal and in addition visits the dentist once or twice a year is not likely to be one whose body is poisoned from the draining of a decayed but painless tooth. Those who are particular about the cleanliness of their person are almost certain to be conscious of health problems and of conditions which may possibly be danger signals concerning their own physical or mental health.

Habits of personal sanitation lead to appreciation for and attempt to obtain a reasonably high type of environmental sanitation. Individuals having the habit of personal sanitation see the need for cleanliness of their living quarters and of their place of work. They notice cleanliness or the lack of it in and around public buildings. The habit of personal sanitation and appreciation for a sanitary environment are stepping stones to physical and mental health. The thinking of a person who emphasizes personal and environmental sanitation is slanted, consciously or unconsciously, toward the welfare of others as well as toward self-protection and self-improvement. Sanitation, environmental as well as personal, should be emphasized by any one who has had the opportunity to grow up in a civilized community.

GERM CONSCIOUSNESS

Controlling the spread of those diseases which are communicable is a matter of personal and public health. In order for the individual to protect himself and others against communicable disease, he should be aware constantly of the following eight ways in which disease germs are transmitted:

- 1. by contact with sick person-chickenpox, diphtheria, influenza, and the like
- 2. by contact with sick animal-undulant fever
- by contact with things sick person has used—diphtheria, influenza, measles, scarlet fever, tuberculosis, and the like
- 4. from drinking water-cholera and typhoid fever
- from food—diphtheria, erysipelas, scarlet fever, tuberculosis, typhoid fever, and the like
- 6. from air-influenza and tuberculosis
- 7. from mammals carrying a specific germ-rabies and tetanus
- from insects carrying a specific germ—diphtheria, malaria, tuberculosis, and the like.

The United States Public Health Service issues numerous leaflet and pamphlet materials concerning communicable diseases and other health problems. Its leaflets deal respectively with the common cold, influenza, diphtheria, chickenpox, measles, whooping cough, tetanus, rabies, tuberculosis, undulant fever, Rocky Mountain spotted fever, poliomyelitis, malaria, and smallpox. Each gives a great amount of nontechnical information which is useful to the person who has a germ consciousness and a desire for facts about common communicable diseases. Many of the publications of the United States Public Health Service can be found in public libraries throughout the country. They can also be secured directly from the United States Public Health Service in Washington, D. C. Some can be obtained free, others at a nominal cost.

Bacteria are nearly always found on the face and hands and many of these bacteria are of a disease-producing variety. The sanitary habit of frequent bathing and much more frequent washing of hands is an excellent means of decreasing the spread of disease.

In youth one should develop a germ consciousness and the ability to recognize conditions under which infection from germs is likely. The individual should inspect a public drinking fountain before using it. Either the design, the adjustment of the stream of water, or the drainage in many of them is faulty to the point of possible contamination to the user. Public eating places which show signs of unsanitary practices should be avoided. People should protect their living quarters and their home food supply from houseflies, mosquitoes, roaches, rats, and mice. In some parts of the United States it is difficult for the most methodical of persons to eliminate all of these carriers of disease.

OBSERVATION AS A FACTOR IN HEALTH

To a considerable extent one's health is a matter of his own conduct and his individual needs. One person feels good when being a vegetarian. If he urges another, even if of approximately his own age, to be a vegetarian he may be advising improperly. The other person may need meat and will thrive on it. Some people require much physical exercise daily and others do not. Some seem to need about two quarts of water daily, others very little; some an average of approximately nine hours of sleep in twenty-four, and others only six.

Each person should experiment in a fairly scientific way, trying certain items of food, one type of physical exercise, and a definite number of hours of sleep, and then variations, in order to exclude those items of food and types of exercise which produce the least desirable results and to determine the amount of sleep that is appropriate. In this way the individual can arrive ultimately at a satisfactory formula for diet, exercise, and sleep, except in unusual instances. By following such an analytical process, in combination with reading about health, and, when in doubt, consulting a general medical practitioner or a medical specialist, a scientific approach to one's own health is made. Such a process is far better than that of adopting and adhering to a health fad or leaping from one fad to another in an attempt to find exuberant and lasting health.

Reading an authoritative book on health and referring to it from time to time after reading it in full is a practical way of guiding and interpreting experimental self-observation. The "hunch" method of arriving at conclusions defeats a scientific purpose. Among those authoritative and readily understandable books on health which are available in almost any public library in the United States are the following:

The Human Body, by Logan Clendening (fourth edition published in 1945 by Alfred A. Knopf)

The Sciene of Health and Disease, a Textbook of Physiology and Hygiene, by Howard W. Haggard (revised edition published by Harper and Brothers in 1938) Healthful Living, by Harold S. Diehl (fourth revised edition published by McGraw-Hill Book Company in 1955)

Healthful Living Based on the Essentials of Physiology, by Jesse Feiring Williams (fourth revised edition published by Macmillan Company in 1947).

One need not be a physiologist to understand these four books. Very quickly on examining them he can find them to be fascinating and useful.

In conjunction with self-observation and reading, an annual medical examination is desirable. However, complete dependence on the results of the annual examinations causes the suffering and gradual death of many persons. One individual cannot know all about malfunctioning and disease in the human body. An intelligent adult will check further if what his physician tells him does not seem to make sense.

Diet is an important factor in health and happiness. Diet should not be determined in a rash way. From time to time various food fads become popular. There are some people who say we should live on yogurt and blackstrap molasses, and those who say we should not; some who say that meats are valueless, others that they should form a large part of the diet. Many of these food fads are debunked by those who know much about diets.

As a result of food fads and cupidity, innumerable misleading statements are made about food in newspapers and in magazines, on radio and on television programs, and on the packages containing food items. Upon the basis of those statements a large number of people select food and expect their selection to work health wonders. Perhaps no one knows just what any person's diet ought to be, owing to enormous variations in the food needs of different persons living in the same block on a given street or in the same household. Yet, through following a few basic principles concerning diet, and the results of careful observation, rather than following food fads or food advertisements, one can come very close to working out a satisfactory diet for himself. One should be aware of the principle that balance in diet is desirable, and that balance requires inclusion of carbohydrates, fats, and proteins in a proper proportion. He or she ought to know that carbohydrates (such as white bread, potatoes, cereals, and sweets of different kinds) produce energy, that fats (such as butter, lard, and suet) digest slowly, that foods with high protein content (lean meats, eggs, fish, beans, and peas) build body tissue, and that vitamins in the diet create a resistance to disease.

The human body is complex. Self-observation with the purpose of maintaining good health, therefore, directs attention to many items. Feet do a tremendous job. Ordinarily they support one's entire weight when standing or walking. The selection of shoes, consequently, is important, and overweight enters the picture. The position in which one sits for hours at a time is worthy of self-observation. An unsatisfactory sitting position causes deformity and cramping of body organs. Is there proper ventilation at home and at work? Are your clothes sufficiently loose fitting to allow the entire body to breathe? Are they sufficiently warm? Do you observe your mental health (discussed in the next section of this chapter) or only your physical? These and many other problems receive the attention of those who use observation as a factor in maintaining their own health. Through observation of a judicious type, they solve some and avoid other problems of health.

The human body is sturdy. There are numerous cases to prove that it can withstand almost unbelievable strain and abuse. Some amazing cases of persons with exceeding high and low body temperatures, of others surviving after long fasts, and still others with severe head and heart injuries, and the like were related by Leonard A. Paris in a popular-type article in *This Week Magazine* of the Washington, D. C. Sunday Star for March 9, 1952. The article was entitled "How Tough Are You?" In it Mr. Paris stated "As mechanisms go, your body is as durable as an Army tank. It

can take the onslaughts of disease and accident and come out on top

oftener than you have any right to expect."

Even though the human body is sturdy, it can be damaged easily, as for instance the ear or the eye. Less obvious vulnerability lies in such matters as exercise and diet. When a middle-aged person engages suddenly in vigorous exercise or follows constantly a diet which is suited only to his taste and not to body requirements, needless strain is placed on the human machine. Proper habits of living constitute a base on which good health is built. The results of careful self-observation can point to any habits which need to be changed from time to time in the interest of one's health. By self-observation, in conjunction with referring to books, taking an annual medical examination, and consulting medical personnel when in doubt, a man or woman of approximately average intelligence or higher and possessing good judgment can determine habits of living which are conducive to his or her health. In short, self-observation of the type indicated here will eliminate most threats to one's physical health.

SIAMESE TWINS

In 1811 twin boys were born in Siam of Chinese parents. The boys were named Eng and Chang and lived until 1874. Due to a connection of flesh between their chests they were bound together. They were able to walk, run, and swim, but where Eng went there went Chang also, and vice versa.

One's mental and physical health are about as inseparable as were the Siamese twins. How often do we see a man or woman in excellent physical health who has been doing a great amount of worrying for several years? Or, how often does one find a well-adjusted man or woman suffering at length from physical ailments except in case of a serious accident, an incurable disease, or old age? Mental and physical health are closely related. Both are of great significance to the individual. The relationship of mind and body, of mental and physical health, poses many problems.

Eng and Chang, the Siamese twins, were dependent on each other. An individual's physical health and mental health are interdependent. This interdependence, or Siamese twin kind of relationship is expressed by the term psychosomatic, which is derived from the Greek words psyche, mean-

ing mind, and soma, meaning body.

The term psychosomatic is not new. It was used 137 years ago in part 2 paragraph 313, page 49 of a book by a German psychiatrist, Johann Christian August Heinroth. The book was published in German, at Leipzig in 1818 with the following title, Lehrbuch der Stoerungen des Seelenlebens oder der Seelenstoerungen und ihrer Behandlung. A copy of the book is preserved by the Army Medical Library, Washington, D. C.

Stedman's Medical Dictionary, sixteenth revised edition, published in 1946 by The Williams and Wilkins Company, Baltimore, defines psychosomatic as "Referring to the relationship between mind and body," and points out that a psychosomatic examination is "that part of a neurological examination bearing upon the psychosensory and psychomotor functions."

It defines psychosensory as "(1) Noting the mental perception and interpretation of sensory stimuli. (2) Noting an hallucination which the mind by an effort is able to distinguish from an actuality." That same medical dictionary defines psychomotor in the following words, "Relating to the mental origin of muscular movement, to the production of voluntary movements." The seventeenth and eighteenth revised editions of the same work, published respectively in 1949 and 1953, give additional information in defining the term psychosomatic. Those editions state: "Pertaining to the influence of the mind or higher functions of the brain (emotions, fears, desires, etc.) upon the functions of the body, especially in relation to disease. p [sychosomatic]. medicine, the study and treatment of diseases or abnormal states of psychosomatic origin."

In 1946 the Philosophical Library in New York published the *Encyclopedia of Psychology*, edited by Philip Lawrence Harriman. A long section in it, pages 678-722, written by Bela Mittelman, is devoted to psychosomatics.

For centuries it has been realized that there is a close relationship between mind and body. It is now known that psychogenic disorders (disorders having a mental origin) cause such physical conditions as backache, fast heart beat, slow heart beat, and stomach trouble. Emotional upsets may affect any organ in the body and cause a condition in which the patient actually feels as though he or she has a physical illness.

Today psychosomatic medicine looks upon mind and body as one. Nevertheless, many physicians may be inclined to give little attention to the mind when treating illness and some psychiatrists are inclined to give relatively little attention to physiology and organic disturbances.

George Washington University's School of Medicine, in Washington, D. C., conducts a course entitled Psychosomatic Aspects of General Medicine. The course meets for one hour per week. Its content is described in the 1955-56 Bulletin of the School of Medicine, in the following words: "Somatic disorders of psychogenic origin. The role of personality reactions in fundamental and organic disorders."

The University of Chicago's Round Table broadcast on September 29, 1946, over the National Broadcasting Company's network, was entitled "Wartime Lessons for Peacetime Psychiatry." During the broadcast, as recorded on page 10 of a pamphlet concerning it, issued by the University of Chicago, Dr. William C. Menninger made the following startling statement: "Fifty per cent of all patients who go to all doctors have fundamentally emotional problems [mental ill-health], and that is why they go."

George Thorman proceeded in the same vein, but in greater detail, in commenting on the relationship of mind and body. On page 4 of Public Affairs Pamphlet No. 120, *Toward Mental Health*, revised edition, 1950, he stated:

Our minds and emotions are closely connected with our bodies. Mind and body interact. Our physical condition can affect our emotions, and our emotions can affect our physical well-being. Doctors have found that more than half of the persons who visit their family physician for treatment of a physical ailment suffer from emotional difficulties which partially explain their physical symptoms. For example, stomach ulcers are frequently connected with worry and anxiety. The help of a psychiatrist may be necessary—or the family doctor himself, if he approaches the patient as a person rather than as a "cardiac patient" or a "stomach case," may be able to bring relief through helping the patient to an understanding of the connection between emotions and symptoms. In such cases, helping the patient overcome his worrying is just as important to his recovery as is proper diet and medical attention.

A large percentage of the men and women in any city or town in the United States can become the victims of mental illness. Life is mainly a series of adjustments to one's environment. The person who adjusts poorly may be in an almost constant state of worry, anxiety, or frustration. Such condition causes mental illness. The mental illness can lead to need for hospitalization. It is more likely to show up in the form of irritability and weakening of physical health. Most of the people who are mentally sick are a nuisance to themselves and to those with whom they associate frequently, but are not dangerous. People who fail to solve the bulk of their problems and who gain little satisfaction from life are subject to rather continuous strain of a type which affects their physical as well as their mental health.

Early in June 1951, the Institute for Psychosomatic and Psychiatric Research and Training, Michael Reese Hospital, Chicago, was dedicated. Dr. Roy R. Grinker, Director of the Institute, participated in the University of Chicago's June 3, 1951, Round Table broadcast which was devoted to the subject "The Psychiatrist's Contribution to the Concept of Health and Disease." This NBC broadcast, as recorded in the University's pamphlet relating to it, gave much attention to the term "comprehensive medicine" and the relationship between mind and body in the matter of health and disease. Dr. Grinker stated:

The common concept of disease in the minds of lay people and unfortunately in the minds of many medical individuals has been that disease is something which comes from without, like the possession of a demon, and actually in our mass communications through magazines and the press people have been led to believe that there is something which gets hold of them, something which gets into them—sometimes because of their own responsibility—and which produces specific illnesses. Today we believe, however, that the external agents, such as germs, representing stresses which come from without the individual, are on rather equal terms with stresses which are inherent within the individual. (Page 2).

Mental illness has afflicted the human race for centuries. Until seventyfive years ago there was little scientific data concerning the causes of mental illness. Many of those whose illness had progressed to obvious insanity were confined, almost like beasts in a cage. There is evidence that violent patients were treated brutally by hospital attendants. Clifford W. Beers, who was graduated from Yale in 1897, feared epilepsy. This fear became an obsession with him by 1900. He attempted suicide unsuccessfully, and spent three years as a patient in Connecticut institutions—in a privately owned asylum operated for profit, in a privately owned non-profit institution, and in a state hospital. The treatment was brutal in all three and not unusual for mental institutions at the turn of the century. Beers wrote vigorously about his institutional experiences and had his manuscript published in book form in 1908 with an introduction by the famous psychologist, William James. The book, entitled A Mind That Found Itself, drew attention to the neglected condition of the mentally ill.

Beers threw himself into the work of providing a defense against mental illness. In the year in which his book appeared, he organized the Connecticut Society for Mental Hygiene. The next year the National Committee for Mental Hygiene came into existence. State societies were organized across the country. An international congress was called in 1930, with fifty-three foreign countries represented.

As a result of the mental hygiene movement much attention was given to improved institutional care of the mentally sick. Child-guidance clinics were established and other projects were undertaken. Effort was put forth to educate the public concerning mental hygiene. In 1946 the Congress of the United States approved the Mental Health Act which established the National Institute for Mental Health in Bethesda, Maryland, and established the principle of making extensive funds available for community mental hygiene programs throughout the United States.

A November 1950 release of the Office of Publications and Reports, Federal Security Agency, entitled "Background on the Nation's Health," made the following statements on its sixth page:

Mental ill health constitutes one of the Nation's major health problems, because of the amount of sickness, disability, and economic loss resulting from it.

—By conservative estimate, more than eight million Americans—over six per cent of the population—are suffering from some form of mental or nervous illness.

-More than half of all the hospital beds in the United States-some 600,000-are occupied by mental patients, on any one day in the year.

-The latter figure includes only the seriously ill, and it does not indicate the full magnitude of the problem, since the number of patients admitted is determined by the number of beds available rather than by the need.

-About ten million of the current population are expected to require hospitalization for mental illness at some time in their lives.

Table 93 of the 1955 issue of Statistical Abstract of the United States indicates there has been no appreciable decrease in the severity of our mental health situation since 1950. The yearly cost of institutional care for persons with bad mental health presents an enormous problem to the American people. Table 93, referred to above, in the 1955 issue of Statistical Abstract of the United States shows that in 1952 the cost of maintaining

state hospitals for psychiatric patients and public institutions for mental defectives and epileptics was \$579,112,000. Of greater concern is the tragedy brought to the persons suffering from mental illness and to their relatives and most intimate friends and the still greater tragedy that much, but an undetermined amount, of the present mental illness could have been prevented.

All persons are under tension frequently. Some do not readily show their tension, others obviously are very nervous and are inclined to create tension wherever they go. Tension should be avoided as much as possible, yet not to the extent of killing enthusiasm and the nervous energy which accomplishes many forms of constructive activity. Being devoid of all tension would put a human adult who is awake in the category of a sluggard or a wet dishcloth.

The tensions which are harmful are those which are associated with worry, anxiety, and frustration. There are many encouraging things in life, but also many discouraging, these latter constituting a cause for tension. People who have a socially constructive attitude see the encouraging, the hopeful, things. Those people with a sour attitude tend to see the discouraging, the negative, and to permit needless tension.

Mental illness may be minor or severe just as a physical illness can range from a cold to tuberculosis. Some people can stand much more mental and emotional tension than others, just as some people are very susceptible to colds and other physical illnesses while some other individuals are scarcely ever sick. Yet, no matter how big a load of trouble a person can handle, there is a limit to his or her resistance to mental illness.

Healthy people have emotional difficulties, such as short periods of irritability, depression, and worry. Everyone has problems. A person in good mental health, however, avoids letting problem after problem get him down. He adjusts to physical changes during various periods of his life and to other changes which he finds necessary from day to day. He knows to a reasonable extent what he wants to do, gets along with people, accepts responsibility in keeping with his abilities and training, and enjoys life to at least a reasonable extent.

Mental health can be improved by an effort to cast pettiness and other useless activities aside and by throwing oneself into the business of living constructively. Those who live in a manner which is socially constructive need have little concern about their mental health. Finding the ways in which we can live constructively and making use of our capacities for living are important steps toward mental health. Dissatisfaction is harder on mental health than is a heavy load of work. Ironing out the conflicts within yourself and the conflicts between yourself and other people is a great promoter of mental health. When free from serious conflicts, one can live creatively and abundantly. And who ever saw bad mental health on the part of one who lives thus?



When Handled Skillfully, Pupil-Teacher Planning of the School Day Is a Desirable Feature of Elementary Education School is something important and real to small boys and girls who help plan their day. This planning can be used to teach them to think. Here the teacher is agreeing with and tactfully modifying, slightly, the plans of the class for a special project for next week.



"Practice Teaching" Is a Means of Training the Prospective Teacher

This student teacher, from Northern State Teachers College, Aberdeen, South Dakota, is conducting a seventh-grade geography class. It is customary for senior students in teachers colleges to teach for approximately two hours daily, as a part of their college work. Finding satisfaction in your work is a factor in mental and physical health. Finding satisfying leisure-time activities helps offset the effects on mental and physical health exerted by being tied to a job that you find irksome. Over a period of years, unless you find satisfaction in your job or during leisure time, your health may be affected seriously. Monotony and fatigue on the job, if excessive and constant and not balanced by interesting and rejuvenating off-the-job activities, cause a strain which neither mind nor body can endure indefinitely.

A hearty laugh now and then, on and off the job, promotes mental and physical health. Furthermore, the ability to see rather consistently a humorous side to one's own problems is a cushion which helps to avoid

cracking up under stress.

Finding satisfaction in life produces a healthy mental outlook, a foundation stone for good mental hygiene. In contrast, brooding over disappointments is dangerous and is very bad mental hygiene, just as failing to brush teeth or to bathe is almost always very bad personal sanitation.

One's mental health is likely to be good or become good if he (1) seeks facts about problems which bother him persistently, (2) studies those facts, and (3) faces their meaning by making adjustments which the facts seem to indicate are desirable. This three-step procedure enables one to live creatively and use his abilities, rather than be fussy and worrysome.

The following of this three-step procedure is probably the best type of mental hygiene for most people and as much as most people need. If one finds it impossible to accomplish the three steps by himself, he should go to someone in whom he has confidence, and ought to ask for help in seeking, studying, and/or facing the relevant facts. The person sought out should be a well-adjusted individual and in addition should be stable. He or she should also be a person whom the one desiring assistance considers to be wise and successful, terms which mean different things to different people. In most instances it probably is preferable that the person sought out should be about the same age as or older than the person seeking assistance and one who has seen quite a bit of life and has understood what he or she has seen.

Often times when talking a problem over with someone else the answer suddenly swings into view as a result of restating the problem. Questions raised by the person to whom the problem is directed also have a way of producing the answer. After seeking help one should try to accept the advice given if the advice sounds at all reasonable to him. The prospect of mental health is good for the person who accepts sound guidance and uses it as a means of obtaining an understanding of his own problems and who realizes fairly accurately the extent of his capacities and limitations.

Persons who are suffering from excessive worry, anxiety, or frustration may be in need of a psychiatrist, or even in need of admission to a mental hospital. Psychiatrists, like wise counselors in any field, have helped many people help themselves. They have also discovered and corrected types of

malfunctioning of the nervous system which only a psychiatrist could find and remedy.

Persons are admitted to mental hospitals for different types of illness or for a combination of types. Today there is approximately a 50-50 chance that a person admitted to a mental hospital will improve in mental health to the point of being released from the hospital. Statistics concerning mental health fail to answer many significant questions. It appears, however, that the sooner one receives professional care, when it is noticed that one is becoming mentally sick to the point of needing professional care, the

greater the possibility of improvement in his mental health.

An individual lacking mental health is somewhat like an automobile without tires. Neither a new Cadillac which was assembled last week nor a 1925 Ford provides satisfactory road service when the tires are lacking. A person with robust physical health who loses his ability to adjust to personal problems may endanger his physical as well as his mental health. He can ultimately become about as ineffective as an automobile that has been stripped of its tires and shaken to pieces. When the inability to adjust to personal problems persists for a long time, the danger to physical as well as to mental health increases, just as an automobile would decline rapidly in mechanical functioning and in money value if driven on paved roads, day after day, without tires.

Two books which are particularly useful to the layman in comprehending the nature and causes of mental illness are the following: Handbook of Psychiatry by Winfred Overholser and Winifred V. Richmond, J. B. Lippincott Company, 1947, and Understandable Psychiatry by Leland E. Hinsie, MacMillan Company, 1948. Each of these books contains a minimum of technical language for a teachnical subject. Both are intelligible

to the general reader.

CONCERN FOR AND INFORMATION ABOUT PUBLIC HEALTH

The term public health refers to the composite physical and mental health of the members of a community. The public health of one community may be relatively good this year as compared with its record of ten years ago and relatively bad by contrast with the public health of a similar-

sized neighboring community.

Public health work consists of formulating and putting into operation measures designed to improve the physical and mental health of the people living in a community. Curtailing the ravages of communicable disease is the major objective of public health programs. In the interest of every one living in a city, or town, the water and milk supply must be protected from contamination. Persons who will stoop to the selling of adulterated and disease-laden food in the name of wholesome food must be restrained in such actions. Proper disposal of garbage, trash, and sewage, including industrial wastes, is necessary. Those who are destitute must receive medical attention when in critical need of it, as a matter of human decency and also as a matter of protecting others from communicable disease.

Such requirements of a civilized community call for a program of public health in the United States, based on state and Federal legislation and city ordinances. State and city governments and the Federal government, therefore, take a leading part in promoting public health. The American Public Health Association is also a leader in the field.

One of the chief functions of a health department is to educate all the people within its jurisdiction concerning methods of preventing and controlling disease. For this reason the United States Public Health Service and state health departments distribute many excellent publications which provide information about what is being done and what needs to be done in the interest of community health.

Largely because of campaigns for control of communicable diseases, the death rate in the United States had decreased markedly during the present century. In 1900 there were 17.2 deaths per thousand as compared with 9.6 per thousand population in 1953. The life expectancy at birth rose from 47.3 years in 1900 to 68.5 years in 1951. Tuberculosis mortality dropped from 194 per 100,000 in 1900 to 26.3 in 1949. In 1954 it dropped to the amazingly low figure of 10.5 according to 1955 estimates by the National Office of Vital Statistics. Typhoid fever and diphtheria now claim few persons in the United States but in 1900 claimed thousands of lives. If people would die of smallpox now at the rate they were dying of that disease in the first ten years of the present century (1900-1909) it could be expected that approximately 10,000 persons would die of it each year, but the annual average during the 1940's was 13 deaths.

As one menace to health is brought under control, such as tuberculosis, another seems to emerge. Man's struggle with disease is constant. When the struggle is conducted with intelligence, it more than holds the line. We cannot afford to neglect public health any more than we can afford to dispense with street lighting and police departments. No matter how well one protects his own life and health, he cannot expect to survive long in a locality of dense population which is devoid of protection from health hazards, and also devoid of protection from accident hazards. The status of public health in a community affects every member of the community. Consequently, public health must be maintained at a decent level so as to avoid retrogression. Unsanitary practices in public eating places, stream pollution, and other conditions present a continuing threat to public health. All who have had the benefit of attending school for a dozen years in childhood and youth and who have acquired maturity should be aware of the status of public health in their community. They should be able to make intelligent general decisions as to what ought to be done to improve health conditions, and, in a general way, how those improvements should be brought about.

Public health is dependent largely upon a sense of sanitation on the part of the individuals who comprise a community. One's concern for public health is evidenced by such actions as covering the mouth when coughing so as to shield another from the common cold, and, when expectorating, doing so in private and in a way that will not cause germs to spread. Respecting quarantine regulations for contagious diseases, especially when respecting those regulations causes inconvenience to oneself, is an additional indication of one's concern for public health. The following statement; issued in the form of a slogan by the National Sanitation Foundation, headquartered in the School of Public Health, University of Michigan, is worthy of reflection:

Sanitation is a way of life. It is the quality of living that is expressed in the clean home, the clean farm, the clean business and industry, the clean neighborhood, the clean community. Being a way of life it must come from within the people; it is nourished by knowledge and grows as an obligation and an ideal in human relations.

When sanitation becomes a way of life in a community, concern for and information about public health will be more than adequate.

THIS WE SHOULD EXPECT:

That, as a result of education received during the years of full-time schooling, an adult should have a safety and sanitation consciousness, an awareness of safety and health problems, and a realization that physical and mental health are each extremely important.

That he or she should know how to use a standard book on health, know how and desire to avoid some problems of personal health and how to meet those which are not avoided; and should have a concern for and at least a small amount of basic information about the status of public health.

We Are Our Brother's Keeper

Responsibility for Others Has Posed a Problem Since Ancient Times Independence?

North and South Pole

A Sense of Social Responsibility Requires Appropriateness Characteristics of a Genuine Sense of Social Responsibility Specific Examples of Social Responsibility

Teamwork

True Greatness

A Rich and Full Life

DUCATION ought to help solve rather than create human problems. If a sense of social responsibility is not developed in the individual, the purposes of education are defeated and trouble is invited. Unless the education secured by an individual during and after the years of attending school on a full-time basis implants a personal sense of responsibility for the welfare of others, it can result in mental cleverness and nothing more. The person lacking a sense of social responsibility will not fulfill his or her obligations to society, and may be a menace. Such a person can be as destructive as a raging young bull moose, with an antler-spread of six feet, turned loose in an art museum. Furthermore, the man or woman who lacks a sense of social responsibility will miss the richest rewards of life. He or she will scarcely be aware of the fact that it is impossible to help another, sincerely, without helping oneself.

We Are Our Brother's Keeper

N ADDITION to being concerned about public health, discussed in the preceding chapter, men and women should be concerned about various matters which involve the welfare of others. Achieving civic responsibility and sound human relationship are purposes of education in a democracy. If a democratic society is to function, rather than degenerate, people must assume responsibility. Those who stoop to secure money through engaging in activities which are harmful to others even though not illegal, or view serious community problems with indifference, have, at best, a warped sense of social responsibility. They are deficient in civic responsi-

bility and short on sound human relationship.

In attempting to exercise a sense of social responsibility, one ought not go to extremes. He or she should neither have cynical characteristics nor be childishly naive. The world is not in a hopeless state of affairs, yet it is beset with many problems. Giving a shrug of the shoulders or a philosophical nod and concluding that nothing can be done to improve conditions, or looking through rose-colored glasses and smiling pleasantly, change nothing. We should attempt to see the world, and, particularly, our own community and field of work, as they are. Frequently such attempt at objectivity will show the world to be a rather good place that is in need of improvement. We can have a very good world but it must be earned. We need to learn to manage technology and ourselves. Unless a large proportion of the population of the world recognizes that each person is his or her brother's keeper, and behaves accordingly, there will be a tremendous obstacle in the path of human progress.

RESPONSIBILITY FOR OTHERS HAS POSED A PROBLEM SINCE ANCIENT TIMES

Mankind has been faced with problems since the beginning of the human race. Cain killed his brother Abel; certainly not a very brotherly act! The ninth verse of the fourth chapter of Genesis in the King James version of the English Bible refers to the tragedy in the following words: "And the Lord said unto Cain, Where is Abel thy brother? And he said, I know not: Am I my brother's keeper?" Cain seems to have stated these words in self-defense, and, perhaps, contemptously and with a sneer. He raised an important question. The answer to it, obviously, from Cain's day to the present, is that we are our brother's keeper. We have a responsibility to help rather than hinder, to make life better rather than to be an obstruction or a harmful influence. A personal sense of social responsibility is the very heart of Christianity.

In addition to Christ, two other great teachers, Confucius of China and Gautama of India (Buddha), can be cited as recognizing the need for individuals to have a concern about the rights and welfare of others. Confucius was born in 550 or 551 B.C. and died in 478 B.C. He urged truthfulness and kindliness and exerted an astounding influence on the Chinese people for many centuries. On several occasions he gave his "golden rule," in the following words: "What you do not like when done to yourself do not do to others." Even though stated in the negative, the consistent following of this early version of the golden rule will evidence a strong sense of social responsibility.

Gautama, who came to be known as Buddha, was born in or about 560 B.C. He was, therefore, a contemporary of Confucius. Buddha preached a highly philosophic religion. In modified form it has come to be one of the greatest religions of the world, having a following of approximately 150,000,000 persons today. Buddha was one of the first religious leaders to urge universal brotherhood and equality. He spoke of the value of the following three personal characteristics: self-denial, charity, and purity of conduct. The individual who possesses these characteristics cannot escape having a sense of social responsibility.

The necessity for helping others and being concerned about public problems is greater than ever. The spirit of being our brother's keeper makes sense in a civilized, mechanized, interdependent world. Urbanization and the large scale production of goods and services are causing people to become increasingly dependent on each other. In the present interdependent age, transportation and communication systems tie much of mankind into one big community where each of us has social responsibilities. We should get to know our own local community and how various organizations performing community services operate and how they are financed—hospitals, the library, the public recreation department with its play grounds, and the water department or water company, and the like.

Warmth and intelligent helpfulness on the part of individuals and government as distinct from an attitude of laissez faire on the one hand and either meddlesomeness or control on the other will do as much as any one thing to make life tolerable in this interdependent era. A sense of social responsibility, in order to be genuine, must be combined with sincerity. It should also be combined with kindly warmth. In short, a sense of social responsibility ought to require men and women to apply the positive version of the golden rule in a plus plus fashion—"Do unto others as you would have them do unto you," but do it now!

In matters economic as well as in health, there is need for a sense of social responsibility. When making a speech entitled "The Labor Question," at the Chicago Labor Day Picnic on September 3, 1900, Theodore Roosevelt referred to the the necessity for considering the rights of others. He was then Republican candidate for the Vice Presidency of the United States. In the address, as printed in his book, The Strenuous Life, Century

Company, 1904, Theodore Roosevelt said "and that while each must work for himself, yet each must also work for the common welfare of all."

(Page 317).

Almost exactly a year after making this statement, Theodore Roosevelt became President of the United States, on the death of William McKinley, September 14, 1901. Roosevelt was soon to see more clearly than ever the need for each to work "for the common welfare of all." Some years later, on October 30, 1912, in an address at Madison Square Garden in New York City, while campaigning for the Presidency of the United States, as candidate of the Progressive Party, he again made a clear-cut statement concerning the necessity for considering the rights of others in matters economic. He said:

We must shape conditions so that no one can own the spirit of the man who lives his task and gives the best there is in him to that task, and it matters not whether this man reaps and sows and wrests his livelihood from the rugged reluctance of the soil or whether with hand or brain he plays his part in the tremendous industrial activities of our great cities. We are striving to meet the needs of all these men, and to meet them in such fashion that all alike shall feel bound together in the bond of a common brotherhood, where each works hard for himself and for those dearest to him, and yet feels that he must also think of his brother's rights because he is in very truth that brother's keeper. (See pages 339-340, volume XVII, Social Justice and Popular Rule, The Works of Theodore Roosevelt, National Edition, Charles Scribner's Sons, 1926.)

Since 1912, when Theodore Roosevelt made the above remarks, the need for brotherhood has become more acute. People today have relatively little opportunity to earn a living by self-employment. Most Americans who have a cash income through work are dependent upon an employer, and the employer is dependent on them. A two-way sense of social responsibility (by the employer on the one hand and by the employee on the other) is essential. All too often this sense of social responsibility is underdeveloped, or almost non-existent, on both hands—on the part of bosses and on the part of their workers.

Many types of regulatory legislation have been enacted by City Councils, State Legislatures, and the Congress of the United States during the twentieth century. This has been done in order to protect all persons residing in the United States from those who engage in activity which is antisocial in a highly interdependent era.

For more than 100 years, with the coming of urbanization in the United States, many families have had serious problems, due mainly to a low economic standard of living. From about 1850 there was much activity on the part of persons with a keen sense of social responsibility, in behalf of unfortunate families. These helpful persons, comprising churches and philanthropic groups, devoted attention to decreasing the ravages of poverty. Their efforts took the form of encouraging temperance and thrift; bringing to the poor the comforts of religion; helping children, the sick, and the aged who were destitute; and attempting to correct those

who were violating the law. As one result of these charitable efforts, orphanges and homes for the aged were established by private contributions.

Regulatory legislation relating to sanitary practices in canneries, to safe building construction, and the like continues to be enacted and to be put into operation. Technicians, such as sanitary engineers, electrical engineers, and chemists are employed by the hundreds in order to put the legislation into proper operation. While these technicians are at work eradicating or preventing some social problems in their community, there are many examples of families, and individuals detached from families, who fail to adjust to the community. During the last thirty years a professional type of social case worker has to a considerable extent taken the place of the charitable work performed by churches and by philanthropic groups. "Social work" has been professionalized. Special schools and departments in universities have been established to train persons to carry on a social case work function. These persons do case work in an organized way with the object of helping unadjusted individuals and families to fit themselves to the community and to fit the community to these unfortunates. Organized social work gradually developed from the charitable efforts of churches and philanthropic groups.

Now, organized social work is conducted mainly by the government at the local, state, and Federal levels. Attention to the health of workers, mothers, and children, and to social insurance for protecting wage earners against major economic hazards, forms a hub around which many social work activities revolve. Social work activities which are conducted by governmental agencies are financed by taxation. Private social work agencies are created by voluntary action rather than by legislation, and are

supported by voluntary contributions.

Regardless of how far reaching and effective the regulatory legislation and either public or private social work may be, it is imperative that all adults have a sense of social responsibility. The need for much of the legislation which is enacted and for organized social work and for professionally trained social workers is largely the result of insufficient sense of social responsibility on the part of people generally. The lack of a sense of social responsibility creates the very problems which require the passage of numerous types of legislation and the hiring of thousands of full-time social workers, building inspectors, and the like. If, as a result of his education, the average citizen would have a genuine sense of social responsibility, there would be few dangerous cracks in the foundation and few large leaks in the roof of America's social structure.

INDEPENDENCE?

Is there anyone who can be completely aloof from all others? In Act 5 of Pygmalion, which he wrote in 1912 and which was published in 1916, George Bernard Shaw said "Independence? That's middle class blasphemy. We are all dependent on one another, every soul of us on earth."

Modern life forces us to be increasingly dependent upon each other. Present civilization can survive and be improved only if the fact is recognized that individuals are dependent on each other—employers on workers, workers on employers, parents on children, children on parents, one professional group on another, one industry on other industries, city dwellers on rural communities, and the like.

A violent maniac is completely out of place in a crowded motion picture theatre. A rugged individualist of the type who has no respect for the rights of anyone but himself is just as much out of place in our modern, interdependent society. If anyone would be completely free to do as he or she wished, the freedom and safety of all would be endangered. Independence itself would be threatened. Regulatory laws, as contrasted with permissive legislation, are necessary in order to protect us from each other.

If anyone would follow only the letter and not the spirit of the law, there still would be much to desire in the way of freedom, safety, and a good life. We are not independent, nor is it wise for us to be independent in the twentieth century. No person is an island complete in itself, although the recluse may think he comes close to being self-sufficient.

NORTH AND SOUTH POLE

No two things on earth can be further apart than the north and south poles. They never meet. The temperature of water varies from the freezing point to the boiling point. Color varies from black to white. The sense of social responsibility varies among individuals from almost zero up to a great concern for the welfare of others. The psychopath and the person who has complete selflessness are at opposite poles, from the standpoint of extent of their sense of social responsibility, when each has a fairly comparable intellect and education.

There is a shockingly large number of people who are on social service payrolls who are basically selfish, thinking more of keeping their program operating or thinking more about maintaining professional status than about helping others. These particular individuals have a milk-and-water sense of social responsibility in spite of the educational opportunity which was made available to them.

A sense of social responsibility should be acquired at home, in school, and in church. Each of these three fundamental institutions of human society ought to emphasize rather than neglect the cultivation of a strong sense of social responsibility in children who are not mentally defective. Social responsibility must be inculcated at least to some extent by providing children and youth with opportunities to assume it and become interested in it. Schools can do much in this regard, but they have an uphill struggle unless receiving the assistance of the home and of the church and unless there are appropriate approvals and disapprovals on the part of the community.

The study of biography can help one to acquire a sense of social responsibility. A sort of hero worship of a living person can also help an individual acquire it. Through attending college many persons gain a concern for the welfare of others. On a campus the student is immersed in an atmosphere which is charged with a concern for human welfare. Courses in sociology emphasize improvement of man's condition. Scientific research in laboratories is directed toward a better life for all.

It can be expected that an adult who lives unselfishly and has been graduated from high school has a well-defined sense of social responsibility. If a person did not acquire this characteristic in childhood and youth (and its parallel, the habit of living unselfishly), the subsequent acquiring of a sense of social responsibility may be most difficult, but not impossible. A small percentage of adults who are deficient in this respect will acquire the sense through the influence of a dynamic individual, or through some striking personal experience, or through interest in the ethical concepts of religion. It is not impossible to swing away from one pole toward the other and to change from cynicism to an interest in human welfare. A man or woman can acquire a sense of social responsibility by determining to do so and by taking on small and then larger projects which require the exercise of a sense of social responsibility. Among these would be community projects of various kinds.

A SENSE OF SOCIAL RESPONSIBILITY REQUIRES APPROPRIATENESS

In the name of the public good, some people seem frequently to pry into the personal life of individuals or to be in the center of a controversy. A few even make tremendous scenes by use of violence and other deplorable tactics. Among these extremists one can mention John Brown, the militant abolitionist of pre-Civil War days, and the notorious Carry Nation, who wrecked saloons in Kansas with an axe in the early 1900's as a means of curtailing the use of intoxicating liquor.

While some individuals seem to be prying into personal matters or engaging in controversy, many others go quietly about the business of eliminating conditions which are harmful to the public.

Appropriateness, of course, is relative. An action that is appropriate in one community may be inappropriate in another, or may be inappropriate in one generation and appropriate several generations later. Complex zoning ordinances would have been inappropriate in Chicago, and even in New York City, in 1850, and are now indispensable in both places. Demanding such ordinances a century ago in Chicago and in New York in the name of public interest could have been regarded as ridiculous. Demanding them now in a lethargic town of 1,000 population as a necessary protection for the public would be ridiculous indeed.

Appropriateness, too, can be a matter of personal opinion. If Carry Nation could speak and wield her axe today, she would probably condemn this viewpoint as being weak and compromising, whereas some ultra conservatives would say that permitting the individual to determine the appropriateness of his or her sense of social responsibility is going entirely too far.

If education would cause most people to have a genuine and balanced sense of social responsibility, many problems, both community and personal, would disappear. Some community and personal problems would decrease in frequency and severity. Life would be better than it now is. Education, therefore, must go much farther than it has gone in providing the individual with an appropriate sense of social responsibility. No doubt this advance can be accomplished largely through the selection of prospective teachers and through their pre-service education and training and their in-service training.

Appropriateness in one's sense of social responsibility requires that he respect cultures other than his own, without giving up what he believes is both right and important from the standpoint of the public good. An appropriate sense of social responsibility requires one to help without dominating, to serve without meddling. The man or woman, having at least a high-school education, who unselfishly and humbly gives thought to public questions, keeps one eye open for an opportunity to help others, and works to build a better community and to improve humanity generally is very likely to have an appropriate sense of social responsibility. Whether thinking in terms of the health, the housing, the employment, wages, and working conditions, or the education and recreation facilities, and the like of a community, he will no doubt exercise an appropriate social concern.

CHARACTERISTICS OF A GENUINE SENSE OF SOCIAL RESPONSIBILITY

A genuine sense of social responsibility includes self-discipline and respect for others. Self-discipline prepares one to see with tempered perspective beyond himself or herself. Respect for others includes respect for the views of other people, their rights, and their welfare. A genuine sense of social responsibility is not apt to develop to any marked extent in most men and women who failed to receive in school, as well as at home, a constructive type of discipline which inspires self-discipline and interest in the well being of their fellows.

It is far easier to talk about a sense of social responsibility than to practice it. In order for an individual to have a many-sided sense of social responsibility that is genuine and in order to put it to work effectively, it is necessary to have an attitude of sincere interest in the welfare of people and a warm personality. These are two basic characteristics of a genuine sense of social responsibility. Substitutions for these two characteristics should not be mistaken for real sincerity and warmth. A person who feels insecure and has an inferiority complex which results in his trying to help almost anyone in almost anything just to elevate personal ego does not have a genuine sense of social responsibility. Nor does the person who gushes over people or dominates them for the sake of personal satisfaction.

It is also essential to believe in the dignity of those being helped. Without this point of view, one's sense of social responsibility cannot be genuine, from a democratic viewpoint. An educated person, even though not having pursued formal schooling beyond the twelfth grade, believes in the dignity of man. When he assumes social responsibility with a genuine desire to help rather than to control human beings, he is giving evidence of his belief.

A sense of social responsibility connotes responsibility. Responsibility is something not to be taken lightly and, preferably, not to be used in a highhanded way. A superior attitude is likely to indicate that the individual's sense of social responsibility is not genuine. A person professing to exercise a sense of social responsibility should have consideration as well as respect for others. So many "social reformers" are authoritarian and actually care for no views, rights, or welfare except their own, and, therefore, show neither respect nor consideration for those with whom they deal, except when forced to do so. A genuine sense of social responsibility requires one to live with consideration for other people instead of for selfish purpose. In taking care of public problems, many "reformers" do so in such a way as to irritate, rather than help people. These particular reformers are interested in a program rather than in the people whom it should help. Some assume social responsibility as a matter of livelihood, others, without financial remuneration but to exercise power. Yet, many reformers do much real good.

The possession of knowledge and intellectual ability carries with it the obligation to use them in behalf of mankind. The persons who have spent four years in college have a very definite duty to be socially responsible. Those who have studied on a college campus for several years after being graduated from college have still greater duty in this direction. Especially should professional persons, with the advantage of their extra years of schooling, be service-minded rather than inclined to concentrate largely on money-making. However, frequently we are disappointed in professional people and in well-educated businessmen. Some spend years in useful organization and administration, research, or other specialized service with almost no thought of monetary return while many who have had an equal number of years of schooling grasp for all the money they can secure through fees, job promotions, and business deals, and make little contribution to humanity. Those concentrating almost exclusively on building their own castles apparently are deficient in the characteristics of a genuine sense of social responsibility.

SPECIFIC EXAMPLES OF SOCIAL RESPONSIBILITY

One can exhibit a sense of social responsibility by being honest and by doing things to prevent inconvenience and harm to others. Some very minor courtesies are evidence of social responsibility. Holding on to waste wrappers and the like until finding a receptacle in which to put them,

rather than tossing them into a corridor or on the street, and being considerate of the immediate comforts of those around you are two simple examples of social responsibility, as well as of good manners.

If parents, school, and church have failed to instill a sense of social responsibility in the individual during childhood and youth, the prospects of the individual's acquiring a sense of social responsibility after leaving full-time school are somewhat remote. A sense of responsibility is developed in others by giving them a bit of responsibility and then increasing the dosage gradually. An adult who has had the misfortune to have been brought up in an atmosphere which did not develop a sense of social responsibility or who has lost such sense can either develop or regain it by deliberately taking on responsibility for a small project which has the welfare of others as its object, and then taking on larger projects of a similar nature. He or she can also pick out a person who has a sense of social responsibility and observe how that person looks on life and what he does as evidence of his sense of social responsibility.

A great deal of nonsense is shouted and written to the effect that each of us should forget everything except other people's problems. We need to be realistic. Most men and women have many responsibilities. Only with great difficulty could they spend several hours daily attending to a wide range of public problems, or to the helping of individuals other than the members of their own immediate family. Furthermore, after attending to their day-to-day responsibilities, they have a right to relax and to devote some time to pleasure.

In the middle years of life—the late twenty's, the thirty's, and the forty's—one tends to be ground so hard by the competition and the challenges of life that he loses some of the zeal for social progress at personal expense and some of the optimism and energy characteristic of youth upon emergence from high school and college. In the middle years, family responsibility and the desire to get ahead financially are dominant factors. During those years most men are struggling for a niche—prestige and economic return. Their wives are inclined to be equally aware of financial responsibilities. Husband and wife soon face the matter of providing their children with a college education.

When family responsibility becomes lighter, after the forty's, parents may have some real property and other savings. As they begin to realize clearly that "you can't take it with you," they again tend to think of doing things which go beyond just taking care of their own responsibilities and the accumulating of wealth.

Even in the difficult middle years of life, one ought to have a sense of social responsibility which extends beyond the limits of his immediate family and beyond one's payroll job. If he has an attitude of helpfulness, a very busy person will find opportunities on and off the job throughout the adult years to do many things which will comprise a useful contribution. Anyone who desires to do so can assume some social responsibility.

Assuming even a small amount of social responsibility is worth while if it is assumed in a helpful, sincere spirit.

The following are specific examples of social responsibility. Some of the twelve examples can involve the expenditure of much time and effort, others very little. Some of the examples are appropriate for the adult who is attempting to develop a sense of social responsibility. Other of the examples furnish additional workshops for persons who have a highly developed sense of social responsibility.

- 1. Selecting a field of work that is useful to humanity, and doing your job well. If a person's job is one that is socially useful, doing that job with a desire to do it well can evidence a sense of social responsibility. Especially in the public service—city, county, state, or Federal—it is possible for a man or woman to show a sense of social responsibility by doing his or her job well. If engaged in producing useful commercial products, such as automobiles, electric irons, refrigerators, or washing machines, a person, too, can exhibit a sense of social responsibility by doing his job well. The worker has an obligation to both employer and to the ultimate consumer. In either public or private employment, the worker should feel duty-bound to do his job well regardless of relatively secure or highly insecure tenure. One with a sense of social responsibility should consider the rights and wishes of fellow workers, especially of those whom he supervises, rather than think only of himself. By considering the rights and wishes of fellow workers, for their sake instead of doing so with the idea of getting them to carry his responsibilities, he indicates concretely a sense of social responsibility.
- 2. Helping to keep streets, public buildings, and other buildings frequented by the public, clean by not tossing wrappers and other waste on the street or on the floor even though waste cans and ash trys are not everywhere in sight.
- 3. Having respect for public property (furniture, library books, and the like) by treating it as carefully as you would like others to treat your own property.
- 4. Performing almost automatically simple functions for the benefit of others, such as picking up broken glass on a side walk where children play or just down off the curb where cars park, so as to avoid injury to a child or puncture to someone's tire. The following is a pertinent illustration. Some persons when seeing a sharp nail sticking up dangerously in a board take time to bend the nail down by tramping on it carefully with their shoe, or turn the board over, so that no one will be injured. Some persons, however, are not observant enough to see the nail in the board and to realize the danger which it presents to all who pass. Still others think it beneath themselves to stop and remedy the situation.
- 5. Protecting others from the poison of prejudice. For centuries prejudice has thrived on ignorance and conflict, and has blighted civilization.

Stemming the tide of prejudice in science, in religion, in economic problems, among racial groups, and the like, even in small ways, is an example of social responsibility. Raising a voice against discrimination rather than giving passive consent to it evidences a sense of social responsibility. A person should be judged on his or her worth, not on race, creed, or the neighborhood in which he lives, or on the amount of money he has, or on the amount of authority he wields. A sincere attitude toward others who differ from us soon dispels prejudice. Practicing equality rather than just talking about it also withers prejudice. Honoring the other person when he or she deserves to be honored helps rid one of prejudice.

6. Being a harbinger of good will for the sake of harmony rather than a monger of hate. Peace is an essential. It cannot be built on hate, only on the brotherhood which evolves from the spreading of good will. Every living person can spread good will or hate. Many can spread either on a large scale. Spreading good will with sincere disinterestedness instead of for business purposes is an excellent example of social responsibility. The International Declaration on Human Rights, drafted by the Commission on Human Rights of the United Nations, was adopted by the UN Assembly in 1948. Article I of the Declaration reads as follows: "All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience, and should act toward one another in a spirit of brotherhood." Neither peace nor any other social problem would be insurmountable if all people would recognize that they are brothers, and if all would follow the advice of Jesus, "Love thy neighbor as thyself."

7. Developing a keen sense of social responsibility in our own children. When parents give their children much love and a considerable amount of training of a high order, a good start in life is provided. Children receiving such attention at home can only rarely become psychopaths or other types of anti-social persons. Parents can develop social responsibility in children by furnishing the children with an example of social responsibility and by teaching them the concept of social responsibility. In order to develop in children a keen sense of social responsibility, the parents should acquaint their children with the feeling of humanitarianism, point to causes of poverty and conflict, and teach the children the following and similar fundamentals:

a. To respect the dignity of the human being

 To be considerate for the rights of other people and to believe that all should have the right to enjoy life

c. To respect people who are different from them as long as those people have no unworthy qualities

d. To avoid hating or coveting and to refrain from poking fun at people to the point of serious irritation

e. To learn to forgive and to apply the golden rule.

8. Engaging in a community project, such as a movement for improved recreation facilities for small children. If one recognizes a social problem

and decides to tackle it, a start has been made in solving that problem. Completing the task may not be as difficult as it seems. Jacob A. Riis (1849-1914) was born in Ribe, Denmark. He came to America when a young man and soon settled in New York City. There he was a carpenter and cabinetmaker. Later he became a journalist, social reformer, and author. While serving as police reporter for the Sun in New York City, he investigated carefully the slums of the city and launched important reforms. Through his sense of social responsibility and his efforts beyond the line of duty, many small parks were established in congested parts of the city. The establishment of these parks, and other reforms which Riis instigated, brought much relief to thousands of persons herded together in unsafe tenement houses. Three of Jacob Riis's books are particularly interesting. They are entitled, respectively, How the Other Half Lives (1890). The Making of an American (1901), which was his autobiography, and The Battle with the Slum (1902). The life and writings of Jacob Riis are fascinating and inspiring as they show how one person's sense of social responsibility and efforts beyond the line of duty can improve the community in which he or she lives. Not all can further community projects as successfully as did Riis, but anyone with a keen sense of social responsibility and good judgment can function effectively in at least a small way in his or her own locality or in the wider field of research and writing. With many men and women having a spirit of service and exercising it judiciously, much harm will be avoided and much good will be accomplished.

9. Assisting in youth work, such as helping direct a Boy Scout troop, giving time to church-sponsored activities for boys or girls of high-school age, and serving as sponsor for a delinquent boy on probation, or in an institution, or on parole.

- 10. Endorsing measures that are in the public interest even if they may cost you money or restrict your activity. Social responsibility is partly a habit. It is a way of life. It is not something that is superficial. The real pinch, the acid test, comes when there is conflict between the individual's interest and the social interest, not when the assumption of social responsibility carries with it a rewarding sense of power and popularity, as in student participation in school government during the high-school years, or, later in life, in politics and public administration.
 - 11. Giving objective thought to problems of public education.
- 12. Devoting time to research and writing concerning scientific or other matters with the object of adding to the total store of useful knowledge.

TEAMWORK

Teamwork is work which is performed by a group of persons who each subordinate their own prominence so as to expedite the work. Teamwork is co-operation. The purpose of teamwork is to produce co-ordinated action which will achieve the goal for which the team is striving. Much of

social progress depends upon teamwork. Teamwork, co-operation, these are the theme of a complex civilization. Without teamwork modern society could not hold together. One who has a sense of social responsibility becomes aware of community problems. Most persons with a sense of social responsibility tend to develop the ability to co-operate as a team member in achieving social progress.

In teamwork it is necessary that each member of the team be cognizant of the problems of others on the team in order that his moves will not hin-

der any member and that his moves may help.

An individual with a keen sense of social responsibility can do much good in a free lance sort of way. However, many necessary community projects can be carried through to successful completion and much legislation that is needed in order to protect the public can be secured only through teamwork, through the pooling of the thinking and other efforts of many persons who have a keen sense of social responsibility. Co-operative action, therefore, is employed to good advantage in furthering the public interest and must be at least as aggressive as are those combinations which conspire against the public interest.

TRUE GREATNESS

Doing things beyond the line of duty, doing them for the sake of service to humanity, doing them without the thought of promotion to a higher salaried job than the one you now have or without the thought of securing a fee or commission or a profit, this is true greatness, whether occurring in large or small measure. It is far different than a cheap sort of greatness aimed at the securing of power, wealth, and publicity.

The person who desires to be great must serve. Those in highly responsible positions do more to assist large numbers of people than is generally known. The truly great are not dictators, but leaders. Leading requires much patience and hard work. Selfless attending to the welfare of others may not seem very rewarding in terms of the wealth and power to be secured, but when well attended it gives one the satisfaction of having done a very necessary job. Selfless attending to the welfare of others is a way of life, one which places emphasis upon service and unselfishness. Many people recognize a person's unselfish service, no matter how small it may be.

Assuming responsibility for improving the condition of others is not a matter of seeing who should have the most credit, but rather a matter of yielding efficient service in a gracious manner. The rendering of service to others for the sake of helping teaches a modesty and humility mixed with self-confidence and a balance in life. It dulls natural selfishness and the animal instinct in man to push others out of his way or use them to climb to temporary heights which tempt and seem almost out of reach. It makes him finer than he would otherwise be. Devotion to public causes gives one a good sense of values.

The greatest serves humbly. The greatest is relatively easy to approach, not haughty and not constantly demanding to be regarded as great. There is a quiet dignity in humility of an intelligent and sincere sort. Doing constructive things for the sake of benefiting people, rather than for personal advancement, is the path to greatness. In short, unselfish service is true greatness.

A RICH AND FULL LIFE

The person with a many-sided sense of social responsibility does numerous things for the sake of benefiting people. In doing so he is rewarded in many ways, most of which can never be taken from him. His life is rich and full. He has the comfortable feeling of having improved conditions for other people. He receives genuine appreciation from at least some people who recognize the worth of his unselfish service. He is able to look himself in the eye, live with himself, and respect himself. Good character and a feeling of satisfaction with life are more important than material wealth. This he realizes. His life, even though filled with many typical problems, is rich and full.

THIS WE SHOULD EXPECT:

That men and women will feel within themselves a duty to refrain from engaging in practices which are harmful to the public interest and that each will devote at least a small portion of his or her time to community improvement or to the sincere and constructive helping of unfortunate individuals.

A Work-a-Day World

Those Who Work Are Entitled To Eat
Study Job Trends
Select a Worthy Field of Work for Which You Are Fitted
Continue To Learn
Find Your Niche
The Importance of Getting Along with People
Pride of Workmanship
Has Thrift Been Forgotten?
Find Ways To Simplify Your Job
Socially Constructive Work Has Great Rewards
Progress Depends Upon Worthy Production

ATERIAL needs-essential food, clothing, shelter, and medical care-and the desire for innumerable goods and services which are not absolutely necessary cause life to be a world of work for most men and women. People who enjoy their work and who attempt consistently to improve their productive skills usually adjust well to the requirements of life. When enjoying his or her work, a person is likely to be happy. When attempting earnestly to improve his or her labors, one usually reduces personal economic problems. Finding work that is satisfying and progressing in that work is largely a matter of using and expanding one's education. Finding work that is satisfying, and progressing in that work, solves large problems in a work-a-day world. In the final analysis a nation's standard of living, and, to a considerable extent, its morale, depends on the abundance or paucity of the productive skills of its men and women and on their desire to use those skills.

A Work-a-Day World

ALMOST all of us must work with head and hand for ourselves and for others. The work of millions of people is good; that of others, such as the obstructionist, is harmful. If we refuse to work, we lose the joy and dignity which come from useful work. We may then become grovelers. A person is known by his or her work. It can and ought to be creative, even

on menial assignments. One should rejoice in his or her work.

After leaving school the individual should seek ways in which to use on the job the productive skills which were learned in school. This ought to be the case regardless of whether one works in a factory or in an office, or as a housewife, or is in business for oneself, or on a farm, as entrepreneur or employee, or occupied in other ways. The productive skills learned in school consist of reading, use of mathematics, analytical thinking, and the like. While productive skills are being used on the job, effort should be put forth to add to those skills. During the first few years of full-time adult responsibility much attention should be given to finding an appropriate niche in the work-a-day world so that the years of work will be satisfying to the individual and useful to society.

In most fields of work one's efficiency should increase steadily until reaching fifty or more years of age. A person in the forties should still be improving his or her ability to perform useful work. Yet, hundreds of thousands of men and women do poorer work in middle life than in their twenties. This is a serious problem. It affects the welfare and the morale

of the nation.

Frequently the office worker or factory hand, and the housewife, perform their daily tasks less well in their middle years than they had done fifteen years before. On first thought, it would seem that job experience should be on the worker's side but as it actually happens the years of employment often decrease job efficiency. Why? Partly because of working conditions, but largely because of the individual's failure to use his education to find a worthy field of work and a niche within it for which he is suited, or failure to use his education to become productive in that niche after finding it. Either of these two failures causes stagnation to set in. The stagnation in turn causes men and women to lose interest in their jobs. As a result, countless people are engaged in work which they do not find challenging. Instead of viewing their job with zest, they look upon it as something which must be tolerated. With this attitude they are in the situation described by Henry David Thoreau as follows in "Life Without Principle" which was published in the October 1863 issue of The Atlantic Monthly:

"Most men would feel insulted, if it were proposed to employ them in throwing stones over a wall, and then in throwing them back, merely that they might earn their wages. But many are no more worthily employed

now." (Page 485).

When leaving full-time school and entering the work-a-day world, there is the possibility that one may fail to carry with him or her, or at least fail to use, the broad principles and the various segments of knowledge acquired during the school years. When the transfer of knowledge and habits of study and analysis from school to job is so poor as to be scarcely noticeable, the individual is likely to drift into a series of daily chores and lose the benefit of education.

THOSE WHO WORK ARE ENTITLED TO EAT

At Jamestown, Virginia, in 1607, one hundred and four colonists estabthe first permanent English settlement in the new world. It was an odd kind of settlement in the wilderness. A large part of these colonists were "gentlemen" unaccustomed to labor. Forests, swamps, disease, and Indians had to be reckoned with. Intrigue and laziness were evident among the colonists. Jamestown faced a precarious existence.

Captain John Smith soon became head of the settlement. He employed a system which operated effectively at Jamestown. Smith required every able-bodied man to work six hours a day and said "He who will not work shall not eat." Sponging was difficult under this policy and the shirker was spotted quickly. The "gentlemen" at Jamestown soon became expert in the use of axe and hoe. Through Smith's leadership and discipline, the idle and the vicious were kept busy at useful work, and the settlement survived.

In a wilderness community facing annihilation, Captain John Smith's authoritarian policy concerning work may have been justified. People everywhere are confronted with the facts, but in a different way than were the early colonists at Jamestown, that in order to eat someone must produce the food; and in order to have the usual comforts of life, work must be

performed.

All but those who are unable to work because of an extreme physical handicap or continued illness of a serious nature should accept the necessity of devoting a considerable part of life to the performance of work that is useful to the world. Those who devote much time to useful work know its salutary effect. They can say with Thomas Aquinas "To live well is to work well, to show a good activity." (Summa Theologicae, LVII, c. 1265).

The great truths endure from century to century. Approximately 500 years after the time of Aquinas, another great thinker, Voltaire in France, wrote "Let us work without protest; it is the only way to make life endurable. . . . Work keeps at bay three great evils: boredom, vice, and need." (Candide, XXX, 1759). Still later Thomas Carlyle of England raised the question, "What is the use of health or of life, if not to do some work therewith?" (Sartor Resartus, I, 1836).

Soon after leaving full-time school, most persons find that they live in a realistic, work-a-day world, a world in which much work must be done in order that people may eat. Some realize that a high standard of living for the nation depends on the productivity of its citizens. Others simply know that, unless they can secure money, they will be denied such things as an automobile, a summer vacation at the beach or at the mountains, an extra change of clothes, and the like.

The business of earning one's way in life poses many intricate problems. The individual can meet a considerable number of these problems successfully by finding a broad, useful field of work to which he must become adapted and in which he must get started with a will to succeed. A person who does this is an asset to his community. In developing highly productive skills and in using them, he makes a contribution which entitles him to a substantial number of the luxuries of modern life.

STUDY JOB TRENDS

For at least the first ten years after leaving full-time school, as well as during the senior high-school and the college years, one should study job trends. Such study is desirable because there is a constant change in the employment picture, and because many persons move from job to job before settling into one job or into one field of work.

Conversion from peacetime production to war production and back to peacetime production causes drastic changes in the employment picture and brings with it clear-cut job trends. During the latter part of World War II, building construction languished. The construction of houses, apartment buildings, office buildings, stores, theatres, and the like was almost non-existent owing to concentration on the war effort. Soon after the war ended on September 2, 1945, a construction boom began which has produced an enormous number of houses, apartment buildings, office buildings, and the like. This boom created a great demand for bricklayers, carpenters, plumbers, electricians, and other skilled construction workers.

The introduction of new processes ushers in new jobs and affects the employment picture. Television, for instance, created jobs dealing with the producing, selling, and installing of television transmitters and receivers and the performing of maintenance work on them. It also created jobs dealing with the operating of television transmitters, the preparing and appearing on television programs, the securing of sponsors for programs, and the conducting of electronics research in order to decrease the production and maintenance expense of television transmitters and receivers and to improve, respectively, their transmission and reception quality.

The vast enlargement of the plastics industry, because of the introduction of new processes, has created demand in the United States for hundreds of chemists in the last twenty-five years. The Modern Plastics Encyclopedia and Engineer's Handbook (seventeenth edition), 1953, published

by Plastics Catalogue Corporation, New York, New York, gives information about plastic products that were not in existence, or scarcely known, thirty years ago. Among them are certain types of wall tile for bathrooms and kitchens, various types of bristles for brushes, special kinds of insulation, motion picture screens, molded chairs, radio cabinets, automotive timing gears, flashlights, suitcases, different kinds of material for wrapping small products for marketing, linings for pipes which carry corrosive liquids, sheets, rods and tubes of many sizes and thicknesses, and an almost endless assortment of castings including cutlery, drawer pulls, knobs, and special heat-and-chemical resistant handles.

During the last twenty years the development of the air conditioning industry in this country has created demand for hundreds of air conditioning engineers and for thousands of skilled tradesmen who fit and install air ducts which are made of sheet metal.

The introduction of new processes not only creates employment. It also throws some jobs, and some fields of work, into the background. Coopers were numerous in the United States in 1880, but not today. There were then more than 50,000 coopers in the country, and less than 50,000 barbers. Inventions in the making of wooden barrels and steel drums introduced new processes which did not call for the cooper's skill.

The shift of an industry from one part of the country to another, such as textile manufacturing moving in considerable part from New England to the South, affects the employment picture in two large parts of the United States. The decline of employment in an industry also has an important effect on the employment picture. The Report of the Department of Mines of Pennsylvania, Part 1, Anthracite, 1923-1924, states on page 18 that there were 180,899 employees in the Pennsylvania anthracite industry in 1914 and only 162,503 in 1924. A five-page undated summary (LS 51-597) prepared by the Mining Division of the Bureau of Labor Statistics of the United States Department of Labor asserts that anthracite mines are located only in Pennsylvania and shows that in 1941 there were 92,300 persons employed in the industry and that employment declined steadily to 1950, except for a rise in 1946 and a rise in 1948, each of which were far below the 1941 figure. Table A-2, page 81, of the July 1952 issue of Monthly Labor Review, published by the United States Department of Labor, shows that the decline continued in 1950 and 1951, with an average of 69,100 employees in 1951. This figure dropped to 36,000 for 1954 and to 34,100 for April 1955. (July 1955 issue of Monthly Labor Review, Table A-3, page 834). Thus, one industry, located in one part of the country, declined in employment from 180,000 to 34,000 in forty years. The booming of an industry, like oil, with its drilling, pumping, and refining, too, has an important effect on the employment picture.

Women have proved their ability to handle a large variety of jobs in offices, stores, factories, commercial laundries, public eating places, and to manage apartment buildings. This fact, together with the fact that many women are employed as social workers, teachers, nurses, newspaper reporters, and telephone operators, has a definite effect in the employment picture. In short, peace and war (and also prosperity and depression, regardless of when they occur), inventions, migrations, and women holding payroll jobs, all make their impress on the employment picture.

Since change in the employment situation goes on constantly, a man can benefit by making some attempt to keep up with the changes until such period in his life as he is reasonably certain that the field of work in which he has established himself is the one he wants to stay with and is one that will probably endure until he plans to retire. But, of course, even after one thinks he has found an enduring niche there may be changes which will block a promising career. For these vicissitudes one must also be prepared.

Information concerning job trends can be secured in a general way by scanning headlines and the "help wanted" columns in newspapers. Almost any public library is an excellent source of information concerning job trends. There one can find many publications, issued by the Federal government and by agencies of states and cities, giving information about job opportunities and requirements.

The Superintendent of Documents, in Washington, D. C., issues price lists of publications of the Federal Government. One of these lists is entitled *Occupations: Professions, and Job Descriptions*. The eighth edition of this list is dated February 1955. It indicates a wide variety of occupational information items which can each be purchased for a small sum. Among the publications carried in the list are the following:

Careers in Mental Health. Revised 1954, 19 pages, 20 cents.

A series of Occupational Guides with a job description section and a labor market information section, each section selling for 5 cents. In the series there is a job description and a labor market information section for the Occupational Guides entitled Aircraft Mechanic, Plumber, and Upholsterer.

A series of six regional pamphlets is issued by the Veterans Administration in cooperation with the United States Department of Labor. One of these is entitled Occupations and Industries in the Pacific States. It was published in 1955. Its 64 pages of text, charts, and tables yield an amazing amount of current data concerning employment and employment trends in California, Oregon, and Washington.

The second edition of the Occupational Outlook Handbook, mentioned above, in chapter 4, was published by the Bureau of Labor Statistics, United States Department of Labor, in 1951. That Handbook, attractively illustrated, and very readable, is useful in studying job trends. Its 574 pages and Supplements, including Occupational Outlook Review, give information on major occupations. For example, on page 63 and page 64 data is given concerning the probable opportunities to obtain employment as a Medical X-ray Technician. In those two pages the nature of his work is described, training and other qualifications are discussed, earnings are

indicated, and sources of additional information about this occupation are listed.

There is great need for a magazine which will give out-of-school men and women concise information about job trends, and in relatively non-technical language. The magazine entitled *The Personnel and Guidance Journal*, successor to *Occupations*, is published monthly, September through May, by the American Personnel and Guidance Association, Inc., in Washington, D. C. It is a professional magazine devoted to vocational guidance and is an important source for the vocational guidance counselor, but it is short on the type of information which many men and women need about trends in occupations.

Under date of April 1949, the Bellman Publishing Company, Inc., in Boston, Massachusetts, issued Volume 1, Number 1 of a popular-type magazine, entitled Occupational Trends. Publication of the magazine seems to have been suspended after its thirteenth issue, which was dated September-October 1951 (Volume 3, Number 1). The thirteen issues give a considerable quantity of information about salaries, opportunities for employment, and nature of duties in different fields of work. It appears, however, to have been prepared mainly to assist students in college to select a career field.

Even with comparatively much occupational information available, it frequently is no easy matter for business experts and vocational guidance counselors to predict occupational trends carefully. A person should be reluctant to change from one field of work to another on the basis of only one oral or published statement concerning job possibilities in his or her present field of work or in another field. In studying job trends it is well to make many comparisons. A single source might be inaccurate. Some published predictions have been wrong. But if observations made by numerous workers in a field, and several sets of published comments concerning that field all form a fairly consistent pattern concerning the future of that field, one can probably rely on that pattern.

When an out-of-school youth or adult engages in a rather systematic process of fact finding about job trends, he is putting his education to use in the work-a-day world. The fact finding can well deal with the nature of different fields of work and with the requirements of employment on different jobs within each, with data concerning the employment out-look in each field—whether many or few people are being employed—and with data which show that the opportunities for promotion are good or poor, and with specific information about tenure, earnings, etc. The strategy of job finding should not end until one locates his niche in the work-a-day world. Finding his niche is an accomplishment which need not occur before the age of thirty years. Until the niche is found, one should continue to study job trends.

SELECT A WORTHY FIELD OF WORK FOR WHICH YOU ARE FITTED

Selecting a field of work that is worthy and for which you are fitted may be a large task. Making a selection that meets these two specifications means much in one's life. Some individuals succeed in making such selection before leaving full-time school; many reach middle or old age without having made such fortunate choice.

What fields of work are "worthy"? This question raises some differences of opinion. It inquires whether or not a field of work is socially constructive. It also introduces the endless task of classifying jobs by fields of work.

A bar tender finds ways to justify his job. The person who edits a hightype newspaper certainly is doing work that is socially constructive. The person who designs straight back chairs and the one who operates a bandsaw and cuts the seat or legs for those chairs or smooths them on a sanding

machine, are both doing useful work, for chairs are needed.

Many jobs within the law are not socially constructive for they do nothing to promote human welfare. Some jobs require so little skill that a person who wishes to use his or her education should avoid them or use them only as a stopgap in a process of finding responsible and stimulating employment. In selecting a field of work, one ought to ask some searching questions about each field to which he gives serious consideration. He should attempt to get into a field which he believes is worth his life.

As a start in pondering over various fields of work, a person can consult the United States Employment Service Dictionary of Occupational Titles, referred to above, in chapter 4. The 22,028 jobs defined in the second edition (1949) of that dictionary are divided into seven major occupational

groups, as follows:

1. Professional and managerial occupations

2. Clerical and sales occupations

- Service occupations (domestic, personal, and protective service occupations and building service workers and porters)
- 4. Agricultural, fishery, forestry, and kindred occupations

Skilled occupations

- 6. Semiskilled occupations
- 7. Unskilled occupations.

Many jobs in each of these seven broad fields can be found in more than one somewhat specialized field of work. For example, the job known as "bulldozer operator" is found in highway construction and in surface mining owing to the need for moving large quantities of earth in both of these activities. After finding a worthy field of work, the next step is to determine whether or not your interests and abilities fit you for that field.

On the temple of Apollo, built at Delphi in Greece during the sixth century B.C., three maxims were inscribed. The first of these, "Know Thyself," is attributed to Thales (640-546 B.C.), chief of the seven "wise men" of Greece. Those two words, "Know Thyself," are challenging. In order to succeed in a work-a-day world one must know himself, must be aware

of his interests, his dislikes, his various abilities, and lack of abilities. It is good for him to get into a field of work that he likes and for which he believes he is fitted, but he can scarcely do so unless he undergoes self-analysis, and seeks help beyond himself, in order to "know" himself. This exploration should begin during the high-school years.

Since the employment picture at any given time has a direct bearing on whether an interest or an ability has much vocational value, the determining of one's vocational interests and abilities involves matching them with job opportunities. In determining whether you are fitted for a particular field of work, it is necessary to consider your personality. If you prefer to work by yourself and with things you may do better in the field of science, working in a laboratory with things, or in the field of statistics, than in a field requiring extensive dealing with people, such as teaching, salesmanship, or foremanship. If you feel as though chained when on a job which requires sitting or standing in one spot day after day, you may be much happier in one that requires quite a bit of moving around, even to such extremes as found on many jobs in the transportation field. Physique and personality and amount of education, too, should be taken into consideration. The matter of determining whether one is fitted for a field of work which he is considering is different for the high-school graduate who goes into full-time employment immediately after completing the twelfth grade from what it is for the physics major at time of being graduated from college, and is somewhat different for women than for men.

In determining whether or not you are fitted for a particular field of work, it is sometimes easier to discover that you are not fitted for the field than to find that you are. The person who has extreme difficulty in mathematics has little possibility of succeeding in a field of work requiring constant use of mathematics, such as statistics. The person who has no mechanical aptitude and whose fingers are "all thumbs" has so little mechanical insight and manipulation dexterity that he will be handicapped severely if attempting to earn his living as a typewriter repairman.

Many people will do well in almost any field of work upon which they concentrate. But any person will find some fields more appropriate than others. The brilliant chemist might not have succeeded in any field if he had avoided the laboratory and had tried doggedly for years to sell household vacuum cleaners.

In spite of the availability of many tests, this process of determining whether or not you are fitted for a particular field of work is not very precise. Tests do better in calling attention to one's not being fitted than to his being fitted for a particular field of work. A validated achievement test in mathematics may tell you that you rate too low in mathematics to obtain a good start in the field of statistics, even though you have been graduated from college. Such a test result is significant, although not entirely conclusive. And even if it were conclusive, the person with much determination to become a statistician might still acquire sufficient achievement in

mathematics to succeed in the field of statistics. If, however, the rating on the mathematics achievement test shows superior accomplishment in mathematics, this would not assure that you will be a successful statistician. The rating is simply an indication that you do not face a mathematics

handicap in statistical work.

When a recognized test of mechanical aptitude and another of finger dexterity indicates that you have little facility in dealing with things mechanical and will have much difficulty in replacing small parts inside a type-writer, it is wise to look for work which requires less mechanical ability and finger dexterity than is characteristic of typewriter repairing. Even if the results of both tests are very favorable, they cannot be regarded as predicting that you are completely fitted for typewriter repairing. Tests do not assure success in the fields to which they relate but do point out one's handicaps and assets. For these reasons a test, or a battery of tests, can help you decide whether or not you are fitted for a particular field which you have selected as being socially constructive, and therefore "worthy."

CONTINUE TO LEARN

High economic efficiency (the expert use of productive skills) is a worthy purpose of education. It is a purpose to which schools should give attention and one on which the individual should concentrate after leaving full-time school.

The value of much that is learned in school has a direct relationship to the amount of time that elapses before it is used. The delayed use of learning is unfortunate in numerous instances. Information that lies dormant in the mind for several years from the time the information is acquired tends to disappear. It is possible to lose learning rapidly after leaving school unless one uses it and adds to it. Living and working do not necessarily result in the improvement of one's education. Using on the job what has been learned during the school years, and consciously continuing to learn to help men and women succeed in their work and to find their niche in the field which they select. It results in adding to their productive skills, both those which are primarily mental and those which are primarily manual. Continuing to learn while on the job is a bulwark against stagnation and the lowering of job efficiency. It is a means of going forward.

During the adult years there is need for emphasis on training, the kind which relates to one's field of work. The person in a business of his own, or on a payroll job, who ceases to acquire knowledge relating to his field cannot expect to progress rapidly in a work-a-day world. If he is in a business of his own, he should determine what he can do to operate it more efficiently than at present, and, perhaps, how it can be expanded profitably, and then act accordingly. If he is an employee, he ought to determine what he can do to improve performance on his job or to prepare to do a more responsible job in his field of work, and then carry his decision into effect. Whether he is in business for himself or on a payroll job, one way a

person can improve the effectiveness of his work is by reading technical publications relating to his field. If in business, he will do well to study the methods and products or services of his competitors. If on a payroll job, he can increase his value to the organization of which he is a part by familiarizing himself with its written instructions. Growing on the job is nearly always necessary in order to advance on the job, or even to continue holding it.

One who is qualified to perform the duties of a skilled or semi-skilled occupation is reasonably assured of steady employment. The acquiring of occupational skills gives most people who acquire them a feeling of pride and security. Acquiring these productive skills beyond the minimum necessary to hold a particular job increases one's possibility of promotion in his field and also increases his opportunity to enter another field of work in case job trends or his own physical condition or preference make such change either necessary or desirable. And, by acquiring an additional skill not exactly related to his field, a man enlarges his possibilities of securing employment. The extra skill equips him doubly.

During the adult years one should do specific things to increase the number and usefulness of his or her work skills. These skills will include widely different specialties such as the ability of one person to write a technical report and the ability of another person to sharpen a saw. In a program of self-improvement, however, one should not lose sight of the value of adding to one's general education. It needs to grow, too, just as specialized training needs to be acquired. Reading great books and attending lectures on art, psychology, and history have their place in the life of almost any man or woman. Self-improvement activities which add to one's productive skills and to his general education will improve his mind and his worth in a work-a-day world.

As an individual you can continue to learn, and at a rapid rate, after leaving full-time school by doing, and follow-through successfully, on any or all of the five things suggested below:

- 1. Talk to the experts in the field of work in which you are interested. By associating, after working hours, with people who know much about the field of work in which you are interested—the experts in the field—much inspiration and technical knowledge can be secured. A few hours per month spent in this way, for the purpose of learning, can be valuable.
- 2. Use the public library. It can actually be a university for the person who uses it. Almost any public library has a surprisingly large number of books, magazines, and pamphlets on business, science, technology, and the like which help one keep abreast with a field of work in which he is interested. Nearly all persons employed in public libraries, except those performing only simple tasks, are skillful in directing the reader to materials of the type for which he inquires. The local library is an institution which inspires and helps thousands of Americans.

3. Ask your local school superintendent for instruction. As one progresses through life he more or less constantly meets situations that are new to him and for which his education has not quite prepared him. Especially is this true in connection with need for technical knowledge about his field of work. The public schools have been very slow to meet this need of men and women in a work-a-day world. The law and public opinion require that education be furnished for persons between the ages of approximately six to eighteen, but does not require that education be furnished for adults. Therefore, public school administrators emphasize elementary and secondary education and tend to neglect adult education.

As a result of two acts of Congress, money is made available to state governments to assist local public schools to provide almost any type of vocational instruction, of less than college grade, needed by high-school youth and also by employed persons and housewives. These acts are known as the Smith-Hughes Act, approved February 23, 1917 (Public Law No. 347, 64th Congress) and the George-Barden Act, approved August 1, 1946 (Public Law No. 586, 79th Congress). Men and women who desire part-time schooling while handling a payroll job and women managing a house-hold should feel free to request their local school superintendent to supply instruction. If persons constituting a small group are zealous to receive instruction in the same subject, there is good prospect that it can be provided for them at hours which are convenient for those persons to meet as a group.

- 4. Ask your employer for in-service training. Men and women who desire to improve their job performance are in demand. Those employees who ask for training are likely to receive it if they show capacity for the training and willingness to absorb it rapidly.
- 5. Enroll in correspondence or extension courses. Correspondence courses in many fields are available from private correspondence schools, some reputable and some otherwise, and from colleges and universities. Extension courses are provided by many public and private colleges and universities. The correspondence course is brought to your mail box. The extension course can be brought to a public meeting place in your community, such as the high-school building.

FIND YOUR NICHE

In the 1940's a road sign near Marlinton, West Virginia, at the junction of a blacktop and a dirt road, read as follows: "Select your rut well, you will be in it for a long time." The motorist who left the blacktop and traversed that unpaved road soon discovered the wisdom contained in those few words.

Life is filled with the necessity to make decisions. We take the road to the left, or to the right, or go straight ahead. We enter one field of work and bypass another. After we make important decisions life stratifies and classifies all of us more than we like to admit. The forty-five-year-old lawyer can scarcely afford to give up law and study medicine when he finds the law distasteful and looks upon the practice of medicine as being a lush pasture. And, even if he could afford to give up his legal work, he would have difficulty gaining admission to medical school. The carpenter in his late forties will be confronted with large problems if he contemplates abandoning his trade in order to become an electrician or an electrical engineer.

A worker tends to become more and more identified with a field of work, and with a speciality within it, after spending quite a number of years in a particular field. This fact more or less places people in ruts, desirable and undesirable, but ruts from which it is difficult for them to extricate themselves. Therefore, one should be careful to continue studying job trends during approximately the first ten years after leaving fulltime school, and also during those ten years to continue studying one's own interests and abilities, so as to find both an appropriate field of work and a special niche in it which one can fill successfully.

Finding the relationship between your field of work and other fields, and between your job and others in your field of work is important. The person who sees those relationships can find his niche, and a good one. Awareness of those relationships helps him (or her) to meet the time when his field may have few opportunities and another field more, or helps him meet the day when personal problems may dictate change of job.

Under a system of free enterprise each person has the right to select, prepare for, and seek employment in any legitimate field of work of his or her choice. Nevertheless, most men and women in America drift into their jobs rather than use their education in selecting a field and a job within it, and in advancing in their field.

Flitting for years from one field of work to another and from job to job within different fields is not a sound way to exercise freedom of work choice. Yet, hastening to settle permanently into a particular job may be unfortunate. In the process of settling into a field of work and in selecting a niche within it, one does well to read rather extensively about that field and to solicit the advice of people who have achieved success in that field.

Once in a niche it is difficult to pull up stakes and move into another very different job. Time well spent in a niche is an investment in it. Nevertheless, for highly adaptable people, experience gained in one field can be used to good advantage in another. However, shifting from one field of work to another, or from one highly specialized job to another within the same field, soon produces diminishing returns, unless job trends dictate such shifting. Usually, changing one's niche after occupying it for ten years requires determination and the acquiring of additional productive skills if success is to be expected as a result of the change. If job trends leave one high and dry after years of employment, the sensible thing to do is to secure another job and try to adjust to it, unless one has already reached an advanced age. An injury causing crippling or blindness, too,

can make it necessary for an individual to move from his or her niche to

other employment.

Usually, the decision that a particular job is or is not one's niche is a conclusion surrounded by intangibles. In many cases the decision will involve some speculation. Seeking analytically is the important factor in finding one's niche.

THE IMPORTANCE OF GETTING ALONG WITH PEOPLE

Regardless of how impartial we attempt to be, we naturally tend to help and to bear with those whom we like. We overlook some of their short-comings. Conversely, it is natural to magnify the defects in those whom we do not like. Much more satisfying is life for the person who gets along with people than for the person who is almost always at odds with his associates. The high school and, to a much greater extent, the college should bring

basic facts of this sort to the attention of youth.

In a work-a-day world the ability to get along with people is a great asset. This fact can scarcely be over-emphasized. Often it is said, rather glibly, that more than seventy-five per cent of the men and women who are fired, lose their jobs because of not getting along with people. In many instances lack of occupational skills is overlooked in a person whose attitude toward his job, his boss, and his fellow workers is good. Occupational skills can be picked up along the way. A boss is likely to have patience with an employee who works diligently and acts as though he appreciates having the job.

In the May 1940 issue of *Personnel* (pages 198-199), Glen U. Cleeton cites two studies of dismissal from jobs. The one, by John M. Brewer of Harvard University, analyzed the reasons for discharging 4,174 employees. Brewer found that personal characteristics such as insubordination, unreliability, and absenteeism were involved in 62.4 per cent of the cases. Only 34.2 per cent of the 4,174 employees were fired due to lack of skill.

The second study cited by Cleeton was made by William C. Ackerly, Secretary of New York Employment Managers Association. Ackerly studied 4,000 dismissals in 76 business institutions. Fourteen per cent of the 4,000 workers were fired for carelessness, according to the reasons given for dismissal; ten per cent for nonco-operation, ten per cent for laziness, eight per cent for dishonesty, eight per cent for attention to outside interests, seven per cent for lack of initiative, seven per cent for lateness, seven per cent for lack of effort, three per cent for disloyalty, two per cent for discourtesy, and 24 per cent for miscellaneous reasons.

The man or woman who is careless on the job, is nonco-operative, lazy, dishonest, and the like, certainly is not making a successful attempt to get along with people. Perhaps this matter of dismissal from the job because of inability to get along with others is not receiving as much attention as it deserves. It is not dealt with in either of two recent, excellent books in which a reader might expect to find is discussed. These books are J.

Stanley Gray's Psychology in Industry, published by McGraw-Hill Book Company, Inc., 1952, and the third edition of Joseph Tiffin's Industrial Psychology, published by Prentice-Hall, Inc., also in 1952.

No particular group of producers should have a corner on the ability to get along with people. Supervisors, as well as those reporting to them, should possess the ability to get along with others. If a supervisor lacks this quality he will cause unpleasantness for those around him. In turn they will be inclined to sulk, to be openly resentful, or to engage in psychological sabotage by spreading rumors, which other workers will be apt to believe.

One who gets along with people takes individual differences into consideration. No two people like exactly the same things or react in exactly the same way to a large series of approaches and occurrences. When dealing with many people in a typical week, one can notice hundreds of individual differences. These differences from person to person make us human rather than mechanical. But these differences create a problem in "getting along" unless one takes them into consideration. As a very simple example of the connection between individual differences and the matter of getting along with people-you slap one man on the back because of knowing him well and knowing that he will take the slap as a gesture of friendship. You refrain from slapping someone else on the back for you know that he is very formal and will consider a slap on the back from you as undue familiarity. By knowing that the first enjoys your back slapping token of friendship and by knowing that the second will not, you get along well with both by being informal with the one and formal with the other.

One should deliberately attempt to avoid either antagonizing or boring people. This conscious effort will require examining your actions and the reactions of other people to them. It may also require the changing of some of those actions.

There are some people who like to be palavered over but palavering is resented by many. The common practice of trying to flatter the boss or to become chummy with him in order to obtain a promotion is disgusting. A good way to get along with most people is to be sincere, and at the same time to be considerate of those about you. On the job, this means treating the boss respectfully by putting yourself into your job and by being cordial to him. Getting along well on the job also means recognizing the worth of your fellow workers and attempting to hold up your end of the work so as not to place an extra burden on them.

We need to understand people—our bosses, our fellow workers, and those who report to us. Furthermore, we need to want earnestly to avoid antagonizing or boring them. These we owe. If we understand people and succeed in not antagonizing or boring them, we will get along well with them. The following, from Mildred McAfee Horton in Man's Loyalties and the American Ideal is in point.

Our troubles with people are accentuated in the twentieth century (as compared with earlier ones) for three reasons. First, more than ever before we know more people—vast numbers of them. Second, more than ever before we know few people well. . . .

People are being badly misunderstood these days—which is one way of stating the third difficulty which I proposed to mention in explaining the troubles in our world. We have tried to treat people as victims of circumstances, psycho-analytic bundles of urges, self-made creatures blameworthy for all the unhappiness they cause, a variety of things which represent an inadequate notion of the inherent nature of the material with which we deal when we deal with each other. We have lost touch with an old-fashioned insight into the nature of human nature. If we could re-establish conviction about what this man is with whom we are dealing, we should find ourselves dealing with other people realistically instead of awkwardly. (Pages 75, 79. Published by State University of New York, Albany, as Proceedings of the Second Annual Symposium sponsored by State University of New York, held at Rochester, April 6-7, 1951).

Then, too, humility is a great virtue. Those who possess it have an element which assists them in getting along with people. In *Poor Richard's Almanac* for 1735 Benjamin Franklin said: "To be humble to superiors is duty, to equals courtesy, to inferiors nobleness."

PRIDE OF WORKMANSHIP

Sir Christopher Wren (1632-1723), the English architect who built that remarkable structure, St. Paul's Anglican cathedral in London, asked three men on one of his projects what they were doing. One replied that he was earning fifteen shillings a week. The second stated that he was mixing mortar. The third is reputed to have said "I am building a cathedral." That reply epitomizes the spirit behind a pride of workmanship. It is a spirit whose foundation can be laid in the elementary school and expanded in high school and college.

Pride, of a lofty type, is a justifiable feeling of elation due to achievement. It is a feeling which makes one glow within himself because of accomplishment. Pride of workmanship is a comfortable feeling which comes to one as the result of doing something extraordinary, even though it be only the building of a mouse trap, but one that is better than all the

others.

The person who uses his education on the job experiences a pride of workmanship. He knows the difference between the superior and the shoddy product, whether in typing a memorandum, building a brick wall, or conducting a business conference. Having a belief that your field of work and your job within it are contributing an important product or service to the world causes you to see the reason for doing your job well. This leads to a pride of workmanship. Anyone should delight in making a contribution to society through the work which he does. The person who sees the social value of his work, and because of its social value desires to do it well, can be proud of the work which he accomplishes.

If one works only for money, and receives nothing more than dollars for the work, his job no doubt will become dull and distasteful to him. In

Henry David Thoreau's article "Life Without Principle" referred to above, Thoreau states: "To have done anything by which you earned money merely is to have been truly idle or worse. If the laborer gets no more than the wages which his employer pays him, he is cheated, he cheats himself." (Page 485, The Atlantic Monthly, October, 1863). Every person ought to have a pride in what he is doing and in how he is doing it. Having the feeling that the job needs to be done right and that the way he is doing it is accomplishing some good gives the worker a lift. Without this pride a job becomes too tedious, except perhaps for very ignorant people engaged in unskilled work. But even with them a sense of doing something that is worth while and a desire to do it well does produce a pride of workmanship which shows up in good sweeping, efficient ditch digging, and the like.

Almost anyone likes to think he can do something better than anyone else. If you acquire that spirit about your job or about a phase of it, and handle that spirit in a way that is not revolting to others, it can cause you

to have a justifiable pride of workmanship.

One ought to be able to take constructive criticism relating to one's work so as to develop craftsmanship. This should be so regardless of whether the job consists of removing tonsils, or reshaping freight car wheels on a lathe. A desire to do one's best rather than just get by is essen-

tial in developing a pride of workmanship.

Taking an interest in your job from day to day enables you to improve your work. Continuous interest in the job is a key factor in developing pride of workmanship. One should see the good that is being accomplished in one's field of work and by the organization with which one is connected. This is necessary in order to maintain genuine interest in the job over a long period of time. If a person believes that the field is not constructive, he should change to another field. If he considers the field to be a worthy one but thinks that the organization for which he is working is not accomplishing a good purpose, he should move on to another organization in which he believes he can put his productive skills to constructive use and where he thinks he can have a pride in what he will do.

A supervisor can develop in others a pride of workmanship by commending them in appropriate ways for the good work which they do. If you are a supervisor of employees you can do as much to create within them a pride of their workmanship as a teacher can create in others a desire to learn.

HAS THRIFT BEEN FORGOTTEN?

In the twentieth century there has been a very noticeable trend away from Benjamin Franklin's eighteenth century advocacy of thrift. But at the same time, in many places of work, there is constant emphasis on the necessity of finding ways to save a minute here and a penny's worth of material somewhere else. Thrift still counts! No nation, or business, or individual can be wasted into prosperity. Lack of emphasis on thrift by the indivi-

dual in handing his or her money and other possessions can be traced to a considerable extent to three trends:

- 1. The passage and strengthening of workmen's compensation laws,
- 2. The policy of providing public assistance for the needy, and
- The policy of the Federal government of encouraging unemployment insurance for millions of workers and of providing old-age and survivors insurance for almost everyone.

Workmen's compensation laws in the United States provide that the employer pay a money compensation to cover medical care and a part of wage loss caused by job-connected accidents. More than half of this legislation also provides compensation for the ravages of occupational disease. Until 1917 workmen's compensation legislation in this country was comparatively ineffective. On March 6 of that year the United States Supreme Court upheld the constitutionality of compulsory workmen's compensation laws in two cases, New York's second compulsory law in the case of New York Central Railroad Company v. White, 243 U. S. 188, and a compulsory law passed by the State of Washington in the case of Mountain Timber Company v. State of Washington, 243 U. S. 219.

In the 1930's an enormous amount of money was spent by Federal, state, and local government in order to assist those who were unable to secure employment. Much money is still being provided at all three levels to take care of needy persons, such as old folks having no income, children whose parents are unable to take care of them, blind persons, and the permanently and totally disabled who are not covered by workmen's compensation. In 1954 Federal grants to state and local governments, for assistance to these needy persons, totalled almost a billion and a half dollars—\$1,437,516,000. (Table 290, Statistical Abstract of the United States, 1955). This represented approximately half the public funds for these needy persons, the remainder being furnished by the state and local governments.

The Social Security Act passed by Congress in 1935 became law on August 14 of that year. Significant amendments were made to it in 1939, in 1950, in 1952 and in 1954. The act furnishes approximately 69,000,000 workers with Federal old-age and survivors insurance.

These types of benefits—compensation for workers who are injured, or whose health is seriously impaired, on the job, public aid for needy persons, and a systematic provision for possible future unemployment and for old age and survivors—are found in the most civilized parts of the world. They have been provided mostly during the last fifty years. They are necessary in a century when one must depend heavily on money for food, clothing, and shelter, and on a payroll job in order to obtain money. This dependence is in sharp contrast to the situation of persons in the United States in the 1850's who could push on to good land that had not yet been settled, and produce on it most of their needs and take care of the sick and older members of their families without too much strain.

Workmen's compensation, public assistance, and social security constitute an enlightened approach to modern economic problems. Yet, in assuring security, they tend to discourage thrift, especially if thrift is not emphasized in school. Current demands for one's earnings also tend to discourage thrift beyond each pay check. Commodity prices, rent, and the market value of land and structures are high. Both direct and indirect taxes are numerous. These facts are due mainly to the cost of international unrest. In addition there are pleas for contributions to many causes. One can scarcely save material wealth unless one resolutely determines to do so. And, in doing so, a person shuts out some worthy activities in which he might otherwise engage. Yet, if he ignores thrift he is only a waster. Many people refuse to save for the day of need when they know there will be a government check for them in case of unemployment and when they reach old age. In spite of this refusal thrift is still important—to the individual, to the employer, and to the nation.

All employers face competitive situations. Most employers appreciate thrift habits which conserve time and materials on the job and which extend the life of equipment. It is not unusual for employers to take into consideration the thrift habits of prospective employees or of those employees whom they are looking over for promotion to highly responsible positions. One who spends his time very wastefully after working hours, spends his money foolishly, lives beyond his income, and fails to take care of his personal property can readily be looked upon by an employer

as a person who will not be thrifty on the job.

No harm is done by establishing habits of thrift. Teachers should be advocates of thrift. They ought to emphasize budgeting of time, thrift in the use of materials and services, and wise use of money. This emphasis during the school years implants thrift consciousness. Education acquired in and out of school assists the individual to budget time and money, to buy well and to use materials and services economically. These thrift skills help one in his personal life and on the job. Many employers seek men and women who exercise these skills during and after working hours.

FIND WAYS TO SIMPLIFY YOUR JOB

There is dignity in simplicity. Even so, there are people who have an amazing propensity for complicating the various tasks which they perform. Also there are people who look scornfully at simplicity, taking the view that things which are simple are of little value. Some people have a fondness for complicated gadgets and procedures regardless of a possible need for complexity. They are the kind who would purchase a "Rube Goldberg" type electric-powered device for swatting flies rather than roll up yesterday's newspaper and use it to do the swatting. Perhaps most people who tend to complicate rather than simplify their jobs do so without being aware that they are making their work difficult. Among various ways in which one can simplify his or her job are the following:



A Hearing Test May Indicate Immediately Why a Child Learns Slowly

These pupils in a public school in Fort Worth, Texas, are receiving a routine test of hearing efficiency.



Administering a Spatial Relations Test

Aptitude, achievement, and intelligence tests yield data which are usful to counselors who assist youth and adults to select curriculum offerings. Test results are one basis for advice given when counseling students in high school and college, or men and women who desire to enroll in adult education activities. In this picture the young man is taking the test while the counselor at George Washington University's Counseling Center is recording his progress.

- 1. Determine to like the job. When one thinks that his job is difficult, it tends to become difficult for him. When one determines to like it, the job usually becomes easier. Liking one's work is a good way to simplify it. Even when the job has been selected with only a small degree of care, it should not be difficult to like the job.
- 2. Plan the work in a simple, clear-cut fashion. A complicated or incomplete plan can be as bad as having no plan.
- 3. Do only as many things at a time as you can do without excessive strain. The continual attempting to do too many things at once produces exasperation. It makes work difficult rather than simple.
- 4. Do the work right. It is simpler to do a job right than to do it poorly and be displeased (unless you have insufficient interest in the job), or to do it poorly and explain why it was not done right, or to do it twice.
- 5. Study your job methods. Through close examination of the procedural steps, machine operations, physical motions, and the like involved in doing various tasks, one can find and then eliminate a surprising amount of unnecessary work. This streamlining has done much to simplify thousands of jobs. Whether one is driving a truck or selling life insurance, the job can be simplified through occasional but thorough study of methods used in performing various phases of the work.
- Avoid procrastination. Work which ought to be done this week may be more difficult to do if left go until next week. A piling up of unfinished work soon becomes overwhelming.

SOCIALLY CONSTRUCTIVE WORK HAS GREAT REWARDS

A job, large or small, that is worth doing brings real happiness to the person who does it well. And, is there any greater reward in life than happiness? Many people seem to be in search of it and are about as unsuccessful in the search as those who would look for the pot of gold at the foot of the rainbow.

Socially constructive work is a splendid defense against a disease now prevalent—boredom. Is it not strange that boredom exists when so many challenging ideas and projects await our attention? Socially constructive work, regardless of whether it deals mainly with people or mainly with bricks, cement, machines and the like can be exciting. The person who looks for the thrill of meeting and solving problems which deserve his concentration on them will experience many thrills in the pursuit of useful work.

Money which has been earned has a way of making a rapid exit. Unless one is engaged in work that is socially constructive, he can expect little satisfaction as recompense for twenty or thirty years of work. Idle people and those doing useless or harmful work cannot share the kind of happiness which is experienced by those who are doing very necessary work and taking pride in it. The men and women who are doing jobs which serve a good purpose even look happier than the idlers, the schemers, and those who do work which is of doubtful value. These facts should be emphasized in high school and in college, and kept in mind by the individual during the adult years.

Performance of socially constructive work yields much more than a pay check. Such work causes the individual to realize that he is contributing toward human progress. He knows that he is having a part in something that is worth doing. This awareness bolsters his self-respect and his peace of mind. A person doing socially constructive work is not likely to spend much time yearning for flattery or worrying about the possibility of being snubbed. Far bigger and more satisfying matters engage his attention. The trivial is disregarded to a large extent. Space is left for the finest things in life, among which are self-respect and the esteem of one's fellows. These are two component parts of the happiness which all of us seek.

PROGRESS DEPENDS UPON WORTHY PRODUCTION

Just as each person should learn to accept the necessity to work and should taste the satisfaction that comes from performing useful work, so each person should realize that worthy production is the basis for progress. Each ought to realize that it is better to wear out because of work than to rust out through lack of it, since progress is dependent upon productive physical and mental activity.

Great nations do not spring up over night. Men do not progress rapidly by sitting idly in a rocking chair. Productive work, and a great deal of it, has made America a progressive nation. Most men who progress rapidly have an excellent production record. They have invented, designed, built, organized, supervised, or in other ways achieved worthy production in large amount.

Worthy production requires a constructive attitude, in contrast to a drag-your-feet attitude. Worthy production will usually be noticed and appreciated by most employers. If a person starts with a minor job—even a dull one—and handles it well, he will prove his ability to produce. Hard work which results in worthy production leads to better jobs. Not always, however, does this production benefit the employee. Sometimes the immediate supervisor is not aware of an employee's high output on the job. Personality clashes or deliberate unfairness on the part of the immediate supervisor or of others above him in the organization may cause an employee to be denied promotion even though his production rate is high. Such conditions can be expected occasionally. Life is like that. Nevertheless, worthy production, in any amount, helps to speed the nation's progress, and usually speeds the economic progress of the individual

producer. A desire to do as little work as possible and to demand as much for it as one dares is a sure way to undermine national progress, and one's self-respect, alike.

THIS WE SHOULD EXPECT:

That schools develop in students a desire to do useful work and that after leaving full-time school the individual should use his (or her) education (1) in attempting to find socially constructive work for which he is fitted, and (2) in carrying on this work; and that during the adult years he increase the number and quality of his productive shills and maintain the desire to use them.

Wise Use of Leisure Time

Life Should Be Joyful
What About the Other Eight Hours?
Competing Successfully with the Years
Types of Leisure Time Activities
Leisure Time Activities Can Be Intellectually Constructive
Should One Have a Hobby?
Selecting a Hobby
Deciding Whether You Will Pursue Your Hobby for Fun or Skill or Both
Travel as a Means of Adventure and Learning
The Wisdom of Reserving Time for Friends

EISURE is a residual. It is the time which is not required by one's job, by daily routine beyond the job, and by special demands. When that residual is used for enjoyment which "recreates," builds mind and body anew, or for the development of useful avocational or vocational skills, it shows signs of being used wisely. From early youth through the remainder of life, the wise use of leisure time does much to preserve the soundness of mind and body and to increase one's education. If leisure is used for enjoyment which harms oneself or others rather than "re-creates," then it is wasted. If it is used in merely sitting or in wondering what to do, or in fretting, it is also being wasted. Leisure time provides the opportunity for enrichment of life and for much adventure. It is the time one can call his very own. But, if it is not used well, it can cause harm or, at best, be drab.

Wise Use of Leisure Time

LEISURE time interest that is sufficiently constructive to provide wholesome pleasure and cause no harm is beneficial for anyone, from a janitor to the president of a large corporation. With a short work week throughout the United States there is relatively much time for leisure. Owing to the fast pace of life, especially on the job, a well-selected leisure time activity can serve as a relaxing influence.

Leisure time wisely used is a tonic. It releases tensions. In addition to furnishing relaxation and wholesome pleasure, leisure time wisely spent can broaden one's education, increase one's work skills, and improve one's ability to get along with others. Nevertheless, some people do not learn

to use leisure time for more than idleness or wasteful activity.

Locke said "He that will make a good use of any part of his life, must allow a large portion of it to recreation." John Masefield asserted, "The hours that make us happy make us wise." These two statements infer that the way in which a man or woman uses leisure time will have a tremendous effect on his or her life. In fact, the great increase in leisure time during recent decades presents a serious public problem. The revised edition of Leisure and Recreation, A Study of Leisure and Recreation in Their Sociological Aspects, by Martin H. and Esther S. Neumeyer, was published by A. S. Barnes and Company, New York, in 1949. The Neumeyers begin the first chapter of the book with the following three paragraphs which are thought provoking, to say the least.

Leisure is here. Modern life is being revolutionized by its rapid extension. People have always had some leisure, but in recent years it has come with such suddenness that few are aware of its far-reaching significance. Never before has there been a period in the history of the world during which leisure has been so widespread as at the present time. Leisure for everybody, a condition now approaching in America, may prove to be the most revolutionary thing that has ever happened.

Society may find its greatest asset in the constructively used leisure of its citizens, but too much free time without adequate preparation for its use also may become the greatest menace to civilization. The increase of leisure has been heralded as a great blessing

to mankind. Its misuses have created grave problems.

The civilizations of the world have been made and unmade by the way in which people have used their free time. The direction of a civilization is conditioned by what people do when they work as well as by what they do when they do not work. People must work to make a living, and many advances have been made in science and technology as the outgrowth of labor. Necessity is the mother of many inventions and discoveries. While work is necessary for subsistence, and no country has ever been able to exist without it, the culture of a group is built up mainly during spare time. Thus, the

direction of a civilization is shaped largely by the extent and uses of leisure, rather than by what people do when they work. The tone of any society is conditioned by the quantity and quality of leisure, whether it be restricted to a few or indulged in by many. If people engage in creative and constructive activities during their leisure, civilization is advanced; if they indulge in useless and destructive activities, the social order deteriorates and progress is retarded.

LIFE SHOULD BE JOYFUL

Much that we see about us is inspiring. The wonders of nature and the remarkable progress that man's inventive and organizing genius has produced make life a happy experience. The amount of time that one can commandeer for leisure makes it possible to enjoy both nature and the progress made by man.

Almost anyone in the United States today has within his or her reach services, food items, amusements, and the like that Plato, Leonardo Da Vinci, and Isaac Newton may have contemplated but of which neither Louis XIV of France nor George Washington caught a glimpse. Both the conveniences and the luxuries now available to the average person in the United States far exceed those which were available to the average American only fifty years ago.

Transportation and communication have been improved to such extent that most men and women have opportunity to visit various parts of the country and to keep in touch with friends throughout the world.

Education is available to all persons in the United States. No one in this country need be shut out from the wisdom of the ages, unless he is mentally defective. Education can condition individuals to enjoy the best things in life.

Contrary to a shackling practice in Europe several generations ago, American youth have long had the opportunity to select a field of work and to progress in it rapidly.

With so many advantages at hand, life indeed should be joyful, even in the face of mid-twentieth century tensions of a serious nature. Leisure time can be a principal means of utilizing current advantages and making life joyful. Leisure time provides this opportunity for recreation. Martin H. and Esther S. Neumeyer in their book entitled Leisure and Recreation, referred to above, say: "A cheerful or unhappy disposition often is cultivated. The joyfulness of recreation has a wholesome effect, for the exuberant spirit and optimistic attitude that characterize play have a tendency to stimulate cheerfulness. No other form of activity has quite the same effect in producing a happy disposition. If one loses the spirit of play, the zest of life is gone." (Pages 154-155.) Life should be joyful and the facilities for enjoying it are at hand for the person who will make use of them.

WHAT ABOUT THE OTHER EIGHT HOURS?

A century ago it was fairly typical for persons in the United States to work from dawn until dark in order to earn a living. Since then machines

and various kinds of technological development have made the worker so productive that a forty-hour week is now sufficient to yield both our necessities and our luxuries.

Even in agriculture, machines and technology in general have increased the productivity of the worker tremendously. In 1820 the production of one worker in the United States supported 4.12 persons at home and abroad. One quarter of the U. S. population was then engaged in farming. In 1954 only a small proportion of our population was engaged in agriculture—8.5 millions out of 162.4 millions—and 18.53 persons, in this country and abroad, were supported per farm worker. From 1910 to 1954 the American farm worker increased his productivity, per hour of work, almost 300 per cent. These facts are shown on pages 30 and 31 of Agricultural Outlook Charts, 1955, and page 41, Changes in Farm Production and Efficiency, Annual Summary, 1955, both published by the United States Department of Agriculture.

The vast increase in the American worker's productivity during the last century ushered in the forty-hour work week for a large majority of employed persons. Typically, it is composed of five eight-hour days. This relatively short week has made it possible for all men and women in the

United States to have leisure time.

It is frequently said that we have eight hours to work, eight hours to sleep, and eight hours for leisure. This categorical statement needs to be scrutinized. Hundreds of thousands of people in America spend two hours per day traveling to and from work. We must eat. Men shave and women primp. All of us attend to many trivial details during those eight waking hours away from the job. Most people on a payroll job, however, have two days a week from the job, a half dozen holidays a year, and a vacation. Perhaps we do have somewhere in the neighborhood of an average of eight hours per day of unencumbered time if we deliberately try to seize it and avoid having potential leisure time being absorbed by unnecessary and unsatisfying things.

Almost every man and woman in America can have a considerable amount of time for leisure if he or she is determined to find that time. By doing extra work, much of it rather useless and puttering, by engaging in amusements which do not satisfy, and by idling or worrying, quite a few people deny themselves time for wholesome pleasure or time which might be used for improving themselves after their daily duties have been performed. Thus they loose those other eight hours, most of which should serve as a means of making life joyful.

COMPETING SUCCESSFULLY WITH THE YEARS

In order to compete successfully with the years, one must find joy and satisfaction in life. Occasionally he must have pleasure which satisfies rather than just glitters like tinsel. Anyone needs this satisfaction. Without it life is shallow. One's job ought to provide satisfaction. His leisure

time activities should provide additional satisfaction. Leisure time activities which are appropriate for an individual furnish enjoyment and help keep him in good physical condition all during the adult years, or help him to return to good health.

Any person, no matter how satisfying he finds his job, needs a change from daily routine. In order to compete successfully with the years, he needs leisure time so that he will have opportunity to do things which provide change and pleasure. The person who fails to use his leisure time as the means for abundant living cannot compete successfully with the years. He will miss too many of the joyful and satisfying things in life. Years of work without play make it impossible for many people ever to enjoy life. They become old and worn and, when they do retire, they do not know how to relax or how to get very much out of their new found leisure.

Spending some leisure time each day (if only a few minutes) doing nothing more than reclining in an easy chair can be a tonic. The man (or woman) who works incessantly is in danger of undermining his health. Especially is this true if the work fails to yield a sense of satisfaction.

The pursuit of leisure time activities which are not in conflict with one's physical, intellectual, or emotional needs assists one greatly in competing with the years. For example, a person who works indoors may find it well to spend a substantial part of his leisure time outdoors, if he likes to be outdoors. When his outdoor leisure time activities, such as hiking, become too strenuous with the passing of the years, he can adjust them to his age by engaging in them less vigorously, or by changing to other activities when he believes the change is necessary. Reading is a favorite leisure time activity for many persons who are interested in things intellectual. Some people are exceedingly gregarious and seem compelled to spend their leisure time in group activities, while others strongly desire to be by themselves after the day's work is finished.

Learning to entertain oneself under varying kinds of circumstances yields an enviable serenity which assists in bypassing potential tensions. If you must wait six hours for a plane, train, or bus and have the ability to find a way of enjoying those six hours, or to make the best of them rather than fret, you have an ability that is much to be desired. One who does not learn to entertain himself under varying conditions may frequently be an unhappy person.

Many people have a strong drive to create. If their job does not permit sufficient opportunity to be creative, they can use their leisure time to build dining room and bedroom furniture, to paint landscapes, and the like. In this way they will release a tension and find satisfaction.

Some people have a powerful aggressive drive that must be expressed. When controlled it takes the form of initiative, ambition, and a determination to achieve. If their job provides little outlet for this drive, then

leisure time activities, such as participation in active sports and games or leadership in club or welfare activities, can come to the rescue.

People who do not find an appropriate way to channel their drive to create and their aggressive drive will cause harm or will chafe under the years rather than live happily. The adult who makes wise use of his leisure time stimulates his mind and provides his body with the type and amount of physical exercise necessary. This two-fold accomplishment helps him meet life confidently.

Many people doing jobs involving far less responsibility than they are capable of handling fail to receive as much mental stimulation on their jobs as they need. Wise use of leisure time provides mental stimulation of the type which one obtains from reading and digesting good books, from making a detailed study of postage stamps, from playing a musical instrument and rather continuously making improvement in ability to play it, and from building attractive furniture.

Some persons do not receive sufficient physical exercise. Especially is this true of men in the United States on desk work. Hundreds of thousands of them need quite a bit of physical exercise during leisure time until approaching the middle years. Wise use of leisure time provides physical exercise, light or strenuous, as required by the individual. The physical exercise causes a release of excess energy and helps keep the body in good tone. Either mental stimulation or the release of excess energy are significant for they assist in reducing tensions which build up in anyone.

Leisure time activities can cause an individual to discover his latent talents and can give him genuine satisfaction. Especially is this true in a creative activity, for the person can view proudly the cedar chest or the dining room table which he built, the tooled leather bag which he made, or the portrait which he painted. These satisfactions bolster his morale substantially.

One should not hesitate to concentrate on a particular leisure time activity nor hesitate to change his emphasis to another activity while the years roll along. As to active sports and games, in the early twenties a man or woman may enjoy tennis. In the late thirties, golf may be much more appropriate. Late in life it may even be necessary to step down to croquet or to sedentary games. The ability to see the need for such changes of pace and to accept the changes gracefully enable one to compete successfully with the years. If a person selects a craft type of hobby, like making furniture, and tires of it, he will do well to change to another hobby in which he has developed an interest. If he can forget his cash and time investment in the previous hobby and be enthusiastic about his new love, the change will do no harm. Hovering indecisively over the furniture making hobby for months and then changing to the new, but for many more months regretting the previous investment, may cause him to find little of interest in the new hobby. His state of mind during leisure hours may become progressively worse. If so, he probably will soon become a part of that multitude of people who find little if anything to be enthusiastic about and find time heavy on their hands when off the job. He, like they, will then not be able to cope easily with the years.

There probably is a tendency for one to become more rigid and less cooperative as the years and the worries of a work-a-day world crowd in. Using leisure time to participate in games, active and sedentary, which call for players to work as a team can help to keep the fire of co-operation burning within the individual. When it burns brightly, rather than smoulders, one is apt to be confronted with only a reasonable number of problems from day to day.

Keeping the following five questions in mind, and using them as a guide when selecting a leisure time activity, whether one plans to engage in it only occasionally or as a hobby, will help him to compete successfully with

the years.

1. Will it increase or decrease my desire for the best things in life?

2. Will it furnish a diversion from my job?

3. Will I enjoy it?

- 4. Will my pursuit of the activity cause harm to anyone, including myself?
- 5. Can I afford the time and the money it will require?

Types of Leisure Time Activities

Leisure time activities are so numerous that it is impossible for anyone to list all of them. They can be classified in different ways. Here, leisure time activities are being divided into six major types and a miscellaneous group, with examples listed under each of the seven. Each of the seven lists is far from complete, but it does indicate leisure time activities which provide enjoyment for men and women.

Creative Activities
 Furniture making
 Leather craft
 Painting landscapes or
 portraits
 Photographing animals
 Pottery making
 Raising flowers, vegetables, trees, or shrubs
 Weaving
 Writing

2. Collecting
Antiques
Autographs
Coins
Glass
Insects
Stamps
Tree leaves
Wild flowers

3. Active and Mildly Active Sports and Games (team and individual, competitive and non-competitive) Archery Badminton Bicycling Bowling Camping Croquet Fishing Golf Hiking Horseback riding Hunting Ice skating Roller skating Shuffleboard Softball Swimming

Table tennis Tennis 4. Sedentary Games Bridge Canasta Checkers Chess

5. Nature Study
Astronomy
Bird study
Insect study
Study of forest animals
Study of rocks
Study of timber trees
Study of wild flowers

6. Other Participating Activities
Being active in Church work, clubs, and welfare agencies Singing in a glee club

Singing

grams

Being active in a fraternal organization Being active in a historical or scientific society Being active in Parent Teacher Association work Learning to play a musical instrument Participating in amateur dramatics

Playing in an orchestra

7. Watching and Listening Activities Attending baseball, basketball, football, and hockey games Attending concerts Attending plays Listening to radio proListening to recordings about good books Listening to recorded music Listening to recordings of historical dramatizations Watching and listening to motion pictures Watching and listening to television programs.

Reading and travel are across-the-board types of leisure time activities. They tie in with various after hours activities. The person who makes furniture in his spare time may want to read books in order to learn about furniture design, selection of wood, and finishing of wood. He may want to visit a furniture factory in a town 100 miles distant so that he can see how the type of table he is interested in building is constructed there. Likewise, the stamp collector reads his philatelic magazines, and journeys to other cities to see stamp collections or to browse through the holdings of a stamp dealer. A fisherman is likely to read sports magazines and books about fishing, and to travel far on his vacation so that he can do lake, northwoods, or deep sea fishing.

Almost any public library has magazines and books concerning the leisure time activities enumerated above, and about still others. A large, well-illustrated book entitled *Time Out for Living* is dedicated to "You and the millions of others in America with leisure time," but seems to have been prepared for high-school students. It was written by E. DeAlton Partridge and Catherine Mooney and was published by American Book Company in 1941. It is filled with hundreds of ideas for use of leisure, many of which adults will want to know about. Thirty-six of the book's 37 chapters include a list of "Some Interesting Things To Do." Thirty of the chapters have a list of references concerning the chapter and the activities which

it suggests.

The Fun Encyclopedia, written by E. O. Harbin and published by the Cokesbury Press, Nashville, Tennessee, in 1940, gives a great number of ideas as to how one can spend leisure time enjoyably. Among the chapter titles found in the book are the following: Home Fun, Fun with Hobbies, Fun with Mental Games, Fun Outdoors, Fun with Music, and Fun with Dramatics.

The Handbook of Active Games, written by Darwin A. Hindman and published by Prentice-Hall, Inc., in 1951, is useful. A book by Sarah Ethridge Hunt and Ethel Cain is entitled Games the World Around. Published in 1950 by A. S. Barnes and Company, this book describes 400 folk games found in China, in Belgium, in India, and in other countries. The book is helpful for one who wishes to spend some of his or her leisure time with children and is in need of ideas for entertaining them.

The person who selects a specialized hobby is likely to find that much helpful material concerning it has already been put in print. For example, the man who desires to buy a small sailboat and handle it successfully in races will enjoy a well-illustrated book by Ted Wells entitled Scientific Sailboat Racing. It was published in 1950 by Dodd, Mead and Company.

One who lives in an apartment or in a small house and must consider the question of space if thinking about a hobby will find *The Book of Indoor Hobbies* by Emanuele Stieri, Whittlesey House, McGraw-Hill Book Company, Inc., 1939, interesting. It gives detailed information as to inexpensive hobbies, such as window-box gardening, which can be carried on in small spaces. Books such as the following are useful to people having hobbies:

Amateur Craftsman's Cyclopedia, prepared by the Editorial Staff of Popular Science Monthly, Popular Science Publishing Company, Inc., New York, 1937.

Woodworking as a Hobby, by Emanuele Stieri, Harper and Brothers, 1939.

How To Make Your Own Furniture, by Henry Lionel Williams, Simmons-Board-man Publishing Corporation, New York, 1951.

Knowing, Collecting, and Restoring Early American Furniture, by Henry Hammond Taylor, J. B. Lippincott Company, 1930.

Wood-Carving as a Hobby, by Herbert W. Faulkner, Harper and Brothers, 1934.

You Can Whittle and Carve, by Amanda Watkins Hellum and Franklin H. Gottshall, The Bruce Publishing Company, Milwaukee, Wisconsin, 1942.

Art Metalwork, A Manual for Amateurs, by Emil F. Kronquist, Whittlesey House, McGraw-Hill Book Company, Inc., 1942.

Tin-Craft as a Hobby, by Enid Bell, Harper and Brothers, 1935.

Pewtercraft as a Hobby, by Emanuele Stieri, Harper and Brothers, 1940.

Silk Screen Stencil Craft as a Hobby, by J. I. Biegeleisen, Harper and Brothers, 1943. Needle Point as a Hobby, D. Geneva Lent, Harper and Brothers, 1942.

Person who like to devote their leisure time to nature study will find a book by William Gould Vinal filled with "what-to-do" ideas. It is entitled Nature Recreation, Group Guidance for the Out-of-Doors and was published by McGraw-Hill Book Company, Inc., in 1940. Although prepared rather much for the one who organizes nature study activities for a group of children or youth, it is useful for the adult who wishes to follow nature study as an individual leisure time activity. Among articles of interest to those who contemplate selecting nature study as a leisure time activity is one devoted to insects. This fascinating article can be found in the June 1952 issue of The American Magazine. The article is entitled "Be a Back-yard Explorer," and was written by Edwin Way Teale.

Did you ever want to be able to pull a rabbit out of a hat when all those about you were certain there was no rabbit there? Magic is a leisure time activity that can be fascinating. A 1949 book entitled Cyclopedia of Magic, published by David McKay Company, Philadelphia, Pennsylvania, is filled with sketches and instructions concerning the performance of many magical tricks.

LEISURE TIME ACTIVITIES CAN BE INTELLECTUALLY CONSTRUCTIVE

The love of good books, the frequenting of libraries, museums, and art galleries, and the visiting of historic places can be highly instructive as well as great sources of joy and, at the same time, inexpensive. These leisure time activities are within the grasp of anyone and can be intellectually constructive providing one sees when he looks.

Many types of leisure time activities can be intellectually constructive as well as pleasurable. In Susquehanna University Studies, 1950, in an article entitled "History as an Avocation," this writer pointed out fourteen advantages in selecting history as a leisure time activity. The fourteen are as follows, a majority having an intellectually constructive result:

- 1. History furnishes enjoyment and provides a pleasant recreation.
- 2. History is only as expensive as one decides to make it.

3. History is non-seasonal.

- History is suited to many types of personality, many kinds of physical conditions, and to persons of almost all ages or economic and social groups.
- History provides opportunity to meet many interesting people with kindred minds.
 - 6. History arouses interest of others in one's own field of investigation.

7. History productively satisfies the human instinct to collect.

 History provides a knowledge of human affairs, both past and present, local or world-wide.

9. History makes available an opportunity to develop creative talents.

- History provides the occasions whereby useful contributions can be made to the sum of human knowledge.
- 11. History furnishes a possibility of making a wide reputation beyond one's vocational field.
- History assists in establishing perspective in personal judgment through the lessons afforded by history.

13. History provides vocational possibilities.

 History aids in giving a sense of proportion and a balance in life by reducing narrow-mindedness.

SHOULD ONE HAVE A HOBBY?

Dictionaries leave us a bit confused as to the meaning of the word hobby. Webster's New International Dictionary of the English Language, Second Edition, Unabridged, published in 1955 by G. and C. Merriam Company, defines the word as follows, "A subject or plan to which one is constantly reverting in discourse, thought, or effort; a topic, theme, or the like (considered as) unduly occuping one's attention or interest." Webster's New Twentieth Century Dictionary of the English Language, Unabridged, published in 1951 by the World Publishing Company, defines hobby as follows: "Any favorite pursuit, topic, or object; that which a person persistently pursues with zeal or delight, as, whist is his hobby." Funk and Wagnalls New "Standard" Dictionary of the English Language, published in 1952 by Funk and Wagnalls Company, defines hobby as "A subject or pursuit in which a person takes extravagant or persistent interest; as, his

hobby was mathematics." Webster's New World Dictionary of the American Language, Encyclopedia Edition, published in 1953 by P. F. Collier and Son, states the following about the word hobby, "3 [Rare], a subject that a person constantly talks about or returns to; hence, 4. something that a person likes to do or study in his spare time; favorite pastime or avocation."

A hobby is an amateur activity rather than the sole or principal means of support. When the lawyer has a rather large garden which he tends in his spare time, for pleasure, gardening is a hobby for him. But for the man who makes his living on five acres by raising strawberries, carrots, and asparagus, gardening is a business, not a hobby. Yet, a person having vegetable gardening as a hobby must work at it sufficiently to produce fully grown vegetables in order to enjoy his hobby.

A French proverb "Everyone to his hobby" (Chacun a sa marotte), implies that each person should have a hobby, and ought to select it himself or herself. One person may claim to have a hobby, yet virtually ignore it, and spend his leisure time idling. Another person may claim a half dozen hobbies and manage to concentrate on each as vigorously as does a cat when it chases a mouse. Some people engage in many leisure time activities, enjoy them, and do not look upon any as being their hobby. As long as a man (or woman) is finding much to do that interests him and causes no harm, he need not be concerned as to whether he engages in an activity sufficiently to be able to classify it as a hobby. By nature he may be happier being a generalist than a specialist during leisure time. It is not imperative that one have a hobby. Nevertheless, a hobby does help an individual avoid the "Oh, if only I had something interesting to do" situation.

SELECTING A HOBBY

For many people their hobby grows up of itself in an intuitive rather than in a reasoned way. In such instances the hobby is acquired as a matter of natural interest, or by imitation of other people. Sometimes this intuitive process is satisfactory. If a man (or woman) decides to select a hobby rather than just let it grow up of itself, he should keep in mind a number of factors, such as his interests, age, physical condition, occupation, income, special abilities, and temperament.

In selecting a hobby one should be reasonably certain that the activity being selected is one which promises him satisfaction. Interests (inclination) ought to guide a person to a large extent in selecting a hobby. But if your eyesight is exceedingly poor, you may not enjoy archery, no matter how much you are interested in it, and if you have a twisted foot you probably would get little satisfaction from mountain climbing. It is possible, however, that tremendous interest may overcome hindrances. One who has a burning desire to paint portraits as a leisure time activity, but who has little talent for such hobby, may, due to interest, develop sufficient skill in painting to yield personal satisfaction.

As in almost anything, when selecting a hobby one should use judgment. It is foolish for the person living in a ten-story apartment house, several miles from the nearest tillable plot of ground, to select gardening as a hobby unless he can be satisfied with gardening in a window box, or is

willing to make the necessary extra effort to go back and forth.

One with a moderate income can find that taking still photographs in black and white is a fascinating hobby, whereas the taking of color motion pictures in 16mm size is a hobby that is far beyond his means. Collecting Stiegel glass, which was made in Pennsylvania by Henry William Stiegel (1729-1795), and is now rare and expensive, is folly unless the person who selects this hobby is prepared to put much money into the collecting and believes that he will receive sufficient satisfaction from it to warrant the money expenditure.

If one's job causes eyestrain to an aggravating extent the hobby which he selects should be one that does not cause eyestrain. If the job keeps him indoors, an outdoor hobby may be much more appropriate than one

that keeps him inside.

A balance between intellectual and physical activity can be provided through proper selection of a hobby. The lawyer finds in gardening a change from the mental requirements of his profession. On the other hand, a carpenter, or other skilled tradesman, who has been graduated from high school, can find the study of American history to be a satisfying leisure time activity.

A hobby can help one develop his personality. If you are a recluse and want to be or if your job causes you to be with people so much during the day that you want to get away from them after working hours, do not select social activities such as amateur dramatics as your principal activity during spare time. But if you are a recluse and want to overcome social inadequacies, you can make a step in that direction by engaging in Parent Teacher Association work, Church work, club and welfare activities, amateur dramatics, and the like as an absorbing leisure time pursuit.

In making selection of a hobby, ideas and perspective can be gained by talking to a person who follows a hobby enthusiastically, and to several others who each nurture their hobbies fondly. Talking with a person who has leather craft as a hobby, to another who devotes much leisure time to furniture refinishing, and to still others with spare-time specialties helps one select a hobby that will be satisfying to him. Consulting books on a hobby shelf at the public library also assists one in selecting a hobby that will yield satisfaction.

If a hobby is selected there is advantage in doing the selecting early in adult life. Several years of experimenting may be necessary to find just the right one, and the experimenting can be fun. If the selecting is delayed until you think you have plenty of time to do it, there is strong possibility that you never will select a hobby that furnishes you with great enjoyment. Nurturing a hobby for a long time, even for only an hour or two a month,

helps one enjoy it when the demands on one's time begin to taper off—for the housewife, for example, when the children leave home after growing up.

DECIDING WHETHER YOU WILL PURSUE YOUR HOBBY FOR FUN OR SKILL OR BOTH

If a hobby is drudgery it fails to serve its purpose. A hobby ought to furnish a refreshing change from one's occupation. The acquiring of skill as a result of following a hobby is desirable but not essential. Deciding whether to pursue your hobby for fun, or skill, or both should depend upon your preference. Any of the three decisions can be appropriate.

There are people who feel guilty when idle for a few minutes during leisure time. They are apt to consider it necessary to strive for skill when pursuing a hobby. If you are the type of person who occasionally likes to get away from eternal efficiency, then you should not follow a hobby just for the sake of acquiring skill. There is quite a bit of advantage in playing golf only for fun rather than for a favorable score.

Wisdom does not require that one's life be organized up to the last minute of each twenty-four hours. Nor does wisdom require that all of one's waking time be geared to productivity. Not all of one's leisure time need be devoted to self-improvement or to community activities in order to use it wisely. Pursuing a wholesome hobby just for the fun of it, and for nothing more, should not cause regret. However, in order to use leisure time wisely, one should refrain from spending the bulk of it on a hobby that is pursued only for fun.

If you decide to pursue your hobby for both fun and skill, you may soon become aware of the fact that the skill which you acquire in this way can give you confidence. Such pursuit of a hobby tends to make one something of a specialist. To his friends the stamp collector becomes an authority on postage stamps, and the person with pottery making as his or her hobby becomes an expert in ceramics. Pursuing a hobby for both fun and skill can make you more interesting to people than otherwise because of the new skill which has been acquired, and because of the fact that you are doing something. Hobbies which require committee work tend to develop social skills. At the same time they further a Church project, a club activity, or other plan which has been undertaken.

Skill developed through pursuit of a hobby which provides a refreshing change from your job may have transfer value that will help you on your job. Skill derived from a hobby may also assist you to meet the requirements of a job which interests you more than your present one. Hobbies have enabled many people to move from one job to a better job, and, also, to earn a supplementary income. But, when a hobby is pursued primarily for either of these two objectives, it may soon fail to provide that refreshing change from your job that it should ideally.

TRAVEL AS A MEANS OF ADVENTURE AND LEARNING

Rapid and fairly inexpensive transportation has made it possible for millions of people to travel during their leisure time. The automobile, especially, has furnished the opportunity for America to move about almost at will. In quite a few parts of the United States families can travel from their homes to a state park and return to their homes in the same day. National parks, much more isolated, are points of great interest on summer vacation trips and are visited by tens of thousands of people each summer. By visiting state parks and places of historic or scientific interest within 100 miles of one's home, and by taking longer trips occasionally, the members of a family can break up daily routine, find adventure, and add substantially to their general education.

Travel, even ever so little, is one more way for an individual to open his mind to things which are beyond daily routine. This opening of the mind causes him to learn new things, and, simultaneously, decreases his provincialism. Just as one learns to perform a task by doing, he learns about forests and forest parks by visiting a state park in the forest, he learns about turkey raising by visiting a turkey farm, and about people in another geographic area than his own by crossing the mountains or the rolling land, or the prairie and visiting another section of the country than the one in which he lives.

But, in order for travel to be a means of adventure and learning it is necessary to be enthusiastic about traveling, to look for the adventure, and to keep eyes and ears open. Planning the trip, reading about the places to be visited, being observant while traveling, picking up pamphlets and maps enroute, and poring over them during the trip and after returning home assures adventure, and learning, too.

Now, traveling extensively, like going to college, is possible for anyone who makes up his or her mind to do so. A round trip bus ticket for a trip from Washington, D. C. to San Francisco, California, and return to Washington, with tax included, only cost \$104.94 in January 1956. Boat passage, tourist class, from New York to Southampton, Liverpool, or Plymouth, England, could then be secured for \$165. Between November 1 and March \$1, the off-season for trans-Atlantic travel, one could fly from New York to London and back to New York for \$482 according to rates quoted in November 1955. An eight-day all-expense winter cruise from New York to Nassau and Bermuda and return to New York was then possible at a charge of \$200. No longer are travel costs prohibitive.

In addition to the adventure of seeing the things that one has heard of and seeing many unanticipated sights, travel to foreign lands enables one to understand that all people have much in common, and that the differences between nations are not insurmountable. Travel provides a fascinating leisure time opportunity to learn at firsthand about faraway lands and the characteristics and contributions of various peoples.

Leisure time travel, whether to foreign countries or to a neighboring state, furnishes unexpected means of adventure and learning. In Chihuahua, capital of the State of Chihuahua, Mexico, late on a warm Saturday evening in April 1952, I stood with amazement looking across a public square at the magnificent and massive cathedral, construction of which began in 1725. Except for electric lights, there was almost nothing in sight typical only of a twentieth century city. With no strain of the imagination I thought that what I saw then was almost identical in appearance to parts of eighteenth century Paris when Voltaire, Rousseau, Franklin, and a host of other notables were there. Anyone can make similar comparisons in his or her travels. And it is thrilling to make them, or to recognize them when they burst on you without a moment's notice!

THE WISDOM OF RESERVING TIME FOR FRIENDS

Spending time with friends is a good way to relax both mind and body. Time spent with friends can result in much more than relaxation. It can also result in the substantial expanding of a person's education. Friendship is one of those warm, grand things which makes life joyful. Among the happiest moments are those spent in a leisurely manner with friends. To have many friends is to be wealthy in the highest sense. There is scarcely any danger of having too many friends. Ralph Waldo Emerson, in Friends—Enemies, said: "He who has a thousand friends has not a friend to spare."

Persons in large cities as well as those living in small towns or in rural areas need friends. No doubt the married couple without children, the bachelor, and the unmarried woman are particularly in need of friends in old age.

Friendship requires time. One must be friendly in order to have friends. A hurried life often causes us to brush people away too quickly, or to fail to jot them a note. Life is too full during working hours to give our friends the time which they deserve. We are not paid to attend to our social life while performing our day's mission. Fortunately, leisure time enables one to do justice to his friends. Nevertheless, while many of us plan to set aside time for friends, things which seem pressing often cause us to shorten the amount of time that we actually spend with them. Friendship requires more time than many of us give it.

All during life it is wise to reserve time for friends so that old friendships will be strengthened and new ones developed. We are told that youth is the time when friendships are made and that, as one grows older, friends usually slip away at a faster rate than new friends are acquired. Some move away from your neighborhood or city, change their field of work, change in their use of leisure time, or pass on. The reserving of leisure time for seeing friends and meeting people so as to acquire additional friends of an honorable type is a wise expenditure of time.

Is there anyone who wants to be without friends? Where is there a hermit who desires that no one should ever visit him or wish him well?

If such a hermit exists, he is a most unusual person.

One may have few friends even though living in a city of many thousands of people. Friendship is a bit like a delicate flower in the midst of sturdy growth. It needs to be cultivated. Associating with friends for the sake of wholesome enjoyment and mutual aid in things which are not unworthy is a noble and, therefore, a wise use of leisure time. But associating with people (in the name of friendship) for the purpose of making on them an impression that you are better or more influential than you actually are, or to exact something from them, or to thrust ideas upon them, is anything but noble and is an unwise use of your time and theirs. Friendship based on expediency is not real friendship. It is merely a conniving arrangement. Being sincere in friendship makes one stronger. It increases self-respect, And, seeing the good in people helps powerfully in making friends.

Cicero's essay on friendship is a remarkable literary piece. Written in 44 B.C., it has been enjoyed for centuries. It forms a small volume of approximately thirty to sixty pages, depending on the fullness of the pages, and is variously entitled the *Laelius*, *De Amicitia*, and *Laelius De Amicitia*. It is warm and refreshing and is written in dialogue form. In the *De Amicitia*, Cicero has Laelius discuss the value, nature, and laws of friendship.

The following excerpt from another remarkable literary piece, Francis Bacon's essay entitled "Of Friendship," published more than three cen-

turies ago, shows that friendship is an intimate relationship.

A principal fruit of friendship is the ease and discharge of the fulness and swellings of the heart, which passions of all kinds do cause and induce. . . . no receipt openeth the heart but a true friend, to whom you may impart griefs, joys, fears, hopes, suspicions, counsels, and whatsoever lieth upon the heart to oppress it, in a kind of civil shrift or confession.

Friendship is a tonic. Elbert Hubbard wrote "There is nothing quite so hygienic as friendship; to love and to be loved means—even pulse, clear eyes, good digestion, sound sleep—success." Sometimes a few minutes spent with a friend is worth as much as several hours of work or thought because of the inspiration given and received and the ideas exchanged. Often, by sharing ideas with a friend, rather than thrusting them upon him, we clarify our thinking by stating the idea. At the same time we pass to him a morsel or a large chunk of the type on which he likes to cogitate. Occasionally it is well to ask a friend for advice. Keeping all of our problems to ourselves causes them to become too large. In talking a problem over with a friend, it may shrink or disappear completely, or a way may be found almost immediately to solve it. As to the value of talking things over with a friend, Bacon says the following in his "Of Friendship" essay:

friendship . . . maketh daylight in the understanding, out of darkness and confusion of thoughts: neither is this to be understood only of faithful counsel, which a man receiveth from his friend; but before you come to that, certain it is, that whosoever hath his mind fraught with many thoughts, his wits and understanding do clarify and break up in the communicating and discoursing with another; he tosseth his thoughts more easily; he marshalleth them more orderly; he seeth how they look when they are turned into words: finally, he waxeth wiser than himself; and that more by an hour's discourse than by a day's meditation.

The art of useful and enjoyable conversation and of a similar type of letter writing is worth acquiring. In many cases it is not developed by the time of leaving full-time school. The ability to converse and correspond will be increased through reserving leisure time to converse on a high plane with nearby friends and to write to those at a distance letters having a literary style of which one can be proud. Furthermore, the content of such conversations and correspondence will enlarge one's stock of knowledge.

It is not undemocratic for men and women who want to enlarge their education to choose friends who already are well educated or are striving to add rapidly to the foundation obtained during the school years. It is well to make an effort to select friends who are worth your time. Reserving time to converse and correspond with sincere persons who each are well informed in a different field is an excellent way to use leisure time to expand one's education. By numbering among your friends representatives from various fields of work, such as a businessman, an agriculturalist, an architect, an engineer, or a skilled tradesman, and a public employee, your conversations or correspondence with each can result in a stimulating exchange which will be beneficial on both ends of the friendship.

"Do you know that conversation is one of the greatest pleasures in life? But it wants leisure." These are words by W. Somerset Maugham, in *The Trembling of a Leaf*, 1921, George H. Doran Company, New York. The art of conversation may be declining because of the rush and noise characteristic of the mid-twentieth century. The radio, television, and motion pictures compete for time which formerly was available for leisurely conversation.

In conversation which is leisurely and of a high order, time is taken to listen to selected friends. Interrupting frequently and thinking of what you are going to say next instead of listening are a bit out of gear. Leisureliness in conversation with friends is worth a part of one's spare time. Relaxing with friends and conversing intelligently, frankly, and not without enthusiasm about broad fields certainly is a wise use of leisure time.

Avoiding the role of a specialist or a salesman often improves conversation. "Easy does it" is a principle that has many applications. In the art of useful and enjoyable conversation, it can mean that one ought to act like a widely informed person who has time to listen and to talk leisurely but deeply about many matters. Discussing trivial things and jumping quickly from one subject to another, like a bird dog going through a thicket in hot pursuit, does not make conversation leisurely and deep. One or a few broad subjects will be sufficient to discuss and mull over in an evening. Exchanging intelligent ideas on broad subjects is a good way to build friendships of a type for which it is worth reserving time.

An interesting letter, of a personal rather than business sort, which reflects the personality of the one writing it, strengthens a friendship. A cheery note to reach a friend in a distant city on his birthday is a considerate gesture and one that binds two friends. Clipping editorials, news items, and articles from newspapers and sending them on to a friend because the subject matter is of interest to him is a kindness that is appreciated. Anyone likes to be remembered by his or her friends.

Letters concerning business must be attended to, yet so often it seems like such a chore to write a letter to a friend. But, like any of us, he appreciates letters from friends when he receives them. Saving a bit of time each week for writing to those whom we esteem might be a good way to get the time to do so.

In writing to a friend there can be a double joy—creation and friendship. The composing of a letter that has commendable literary style is creative. Things which interest the person to whom the letter is being written can be recalled (and this is often pleasurable in itself) and told in lucid way. Detail, technical data, sense of humor, and the like can each be woven into the message. Doing a good job of letter writing enhances one's literary style as well as delights the person to whom it is addressed. Corresponding with persons in different countries enlarges one's knowledge of other peoples. Corresponding with highly educated persons, regardless of where they are located, can stimulate one's mind and provide it with many useful facts.

No one can be sure to have friends throughout life unless one reserves some time for them. Reserving time for friends strengthens friendships. This reserving is a source of delightful relaxation which often will be inspiring and instructive as well as relaxing.

THIS WE SHOULD EXPECT:

That men and women find leisure time and use a substantial part of it as a source of abundant living—something more than relaxation or physical exercise.

Constructive Self-Analysis

Franklin's Plan
Man or Mouse?
What They Say About You
How Good Are Your Interpersonal Relationships?
No Adequate Substitute for Sincerity and Enthusiasm
The Corrosiveness of Fear and Worry
The Power of Thinking
The Value of Decision
Self-Mastery Is Necessary
What About a Yearly Inventory?

HAT is more essential, or more difficult, than careful self-examination with a view to improvement? When conducted in a manner that is both objective and penetrating, introspection is one of the most profound steps in the process of education. Like learning to read and learning to think, it is an indispensable step.

Constructive Self-Analysis

The choicest literature of ancient, medieval, and modern times contains numerous testimonials to the value of objective self-examination. Jeremy Taylor (1613-1667), an English prelate and author, wrote "Observe thyself as thy greatest enemy would do, so shalt thou be thy greatest friend." Lucius Annaeus Seneca (c. 4 B.C.-65 A.D.), a Roman philosopher, left the following statement for us to ponder over: "We should every night call ourselves to an account: What infirmity have I mastered to-day? what passions opposed? what temptation resisted? what virtue acquired? Our vices will abate of themselves if they be brought every day to the shrift."

Constructive self-analysis requires an individual to scrutinize his own actions with a view to measuring how well he applies his talents and knowledge. This scrutiny fosters integrity and judgment. Time spent in constructive self-analysis is well spent. Many of our shortcomings are due to inability to obtain a correct picture of ourselves. Common sense prompts us to look squarely at the facts about ourselves, whether they are encouraging or not. Yet, it takes a great deal of courage for one to see himself exactly as he is. But, quite a few other people see him just that way.

Unless one knows what his deficiencies are, he can scarcely set about remedying them. If we wait for other people to point out to us our defects, many shortcomings will not receive attention. Our best friends will not tell us about some defects which we could easily remedy if only we were aware of those particular defects. On the other hand, in many respects, an individual can determine his capabilities and deficiencies better than anyone else can evaluate them.

Self-analysis involves many matters. It includes your relations with other people, types of activities to undertake from time to time, and managing your income. Anyone benefits by occasional objective self-examination to see if he or she is slipping into a rut. When observing undesirable characteristics in others, as for instance poor posture and irritating mannerisms, it is wise to examine ourselves in order to see if we have neglected to notice the slow growth in ourselves of similar undesirable characteristics.

Self-analysis is an excellent exercise. Try it. Attempt to be absolutely honest with yourself in making the analysis, but not too hard, or too lenient. Then do something about eradicating the shortcomings which you find, and also do something to build on your stock of assets.

One of the most important things which schools can teach is to benefit from mistakes. A person who makes a mistake and fails to correct it, thereby makes a second mistake. In the same way, self-analysis without follow-up is not constructive. It is like a dripping dishcloth laid aside to become a cold, soggy mass. Constructive action following self-analysis enables you to help yourself. In addition, such action is a good influence on those who have intimate contact with you.

Fortunate is the man who is aware of his defects and tries to remove them and who knows his capabilities and attempts to enlarge them. He is a person who increases his usefulness, and probably knows what he wants to achieve, and who sees what he must do to himself to achieve his goal.

FRANKLIN'S PLAN

In his Autobiography, Benjamin Franklin described a constructive selfanalysis plan which he devised. It can be stated best in his own words, which are as follows:

It was about this time [probably in the summer of 1733, when he was 27 years old] I conceiv'd the bold and arduous project of arriving at moral perfection. I wish'd to live without committing any fault at any time; I would conquer all that either natural inclination, custom, or company might lead me into. As I knew, or thought I knew, what was right and wrong, I did not see why I might not always do the one and avoid the other. But I soon found I had undertaken a task of more difficulty than I had imagined. While my care was employ'd in guarding against one fault, I was often surprised by another; habit took the advantage of inattention; inclination was sometimes too strong for reason. I concluded, at length, that the mere speculative conviction that it was our interest to be completely virtuous, was not sufficient to prevent our slipping; and that the contrary habits must be broken, and good ones acquired and established, before we can have any dependence on a steady, uniform rectitude of conduct. For this purpose I therefore contrived the following method. • •

• • • I included under thirteen names of virtues all that at that time occurr'd to me as necessary or desirable, had annexed to each a short precept, which fully express'd the extent I gave to its meaning.

These names of virtues, with their precepts, were:

- 1. TEMPERANCE-Eat not to dullness; drink not to elevation.
- SILENCE-Speak not but what may benefit others or yourself; avoid trifling conversation.
- ORDER-Let all your things have their places; let each part of your business have its time.
- RESOLUTION—Resolve to perform what you ought; perform without fail what you resolve.
- FRUGALITY—Make no expense but to do good to others or yourself; i.e., waste nothing.
- INDUSTRY—Lose no time; be always employ'd in something useful; cut off all unnecessary actions.
- SINCERITY-Use no hurtful deceit; think innocently and justly, and, if you speak, speak accordingly.

- JUSTICE—Wrong none by doing injuries, or omitting the benefits that are your duty.
- MODERATION—Avoid extreams; forbear resenting injuries so much as you think they deserve.
 - 10. CLEANLINESS-Tolerate no uncleanliness in body, cloaths, or habitation.
- 11. TRANQUILLITY-Be not disturbed at trifles, or at accidents common or unavoidable.
- 12. CHASTITY-Rarely use venery but for health or offspring, never to dulness, weakness, or the injury of your own or another's peace or reputation.
 - 13. HUMILITY-Imitate Jesus and Socrates.

My intention being to acquire the habitude of all these virtues, I judg'd it would be well not to distract my attention by attempting the whole at once, but to fix it on one of them at a time; and, when I should be master of that, then to proceed to another, and so on, till I should have gone thro' the thirteen; and, as the previous acquisition of some might facilitate the acquisition of certain others, I arrang'd them with that view, as they stand above. Temperance first, as it tends to procure that coolness and clearness of head, which is so necessary where constant vigilance was to be kept up, and guard maintained against the unremitting attraction of ancient habits, and the force of perpetual temptations. This being acquir'd and establish'd, Silence would be more easy; and my desire being to gain knowledge at the same time that I improv'd in virtue, and considering that in conversation is was obtain'd rather by the use of the ears than of the tongue, and therefore wishing to break a habit I was getting into of prattling, punning, and joking, which only made me acceptable to trifling company, I gave Silence the second place. This and the next, Order, I expected would allow me more time for attending to my project and my studies. Resolution, once become habitual, would keep me firm in my endeavors to obtain all the subsequent virtues; Frugality and Industry freeing me from my remaining debt, and producing affluence and independence, would make more easy the practice of Sincerity and Justice, etc., etc. Conceiving then, that, agreeably to the advice of Pythagoras in his Golden Verses, daily examination would be necessary, I contrived the following method for conducting that examination.

I made a little book, in which I allotted a page for each of the virtues. I rul'd each page with red ink, so as to have seven columns, one for each day of the week, marking each column with a letter for the day. I cross'd these columns with thirteen red lines, marking the beginning of each line with the first letter of one of the virtues, on, which line, and in its proper column, I might mark, by a little black spot, every fault I found upon examination to have been committed respecting that virtue upon that day.

I determined to give a week's strict attention to each of the virtues successively. Thus, in the first week, my great guard was to avoid every day the least offense against Temperance, leaving the other virtues to their ordinary chance, only marking every evening the faults of the day. Thus, if in the first week I could keep my first line, marked T, clear of spots, I suppos'd the habit of that virtue so much strengthen'd, and its opposite weaken'd, that I might venture extending my attention to include the next, and for the following week keep both lines clear of spots. Proceeding thus to the last, I could go thro' a course compleat in thirteen weeks, and four courses in a year. And like him who, having a garden to weed, does not attempt to eradicate all the bad herbs at once, which would exceed his reach and his strength, but works on one of the beds at a time, and, having accomplish'd the first, proceeds to the second, so I should have, I hoped, the encouraging pleasure of seeing on my pages the progress I made in virtue, by clearing

Form of the pages.

EAT NOT TO DULNESS; DRINK NOT TO ELEVATION							
T.							
S.	*	*				*	
O.	**	*			*		
R.	7		*				
F.		*			*		
I.							
S.							
J.							
M.					-		
C.							
T.			-		-		_
C.							
H.		-		_			-

successively my lines of their spots, till in the end, by a number of courses, I should be happy in viewing a clean book, after a thirteen weeks' daily examination. • • •

I enter'd upon the execution of this plan for self-examination, and continu'd it with occasional intermissions for some time. I was surpris'd to find myself so much fuller of faults than I had imagined; but I had the satisfaction of seeing them diminish. (Taken from pages 82-88 of the Autiobiography as reprinted in volume 1 of The Harvard Classics, published in 1909 by P. F. Collier & Son Company).

Following Franklin's plan, somewhat, a man or woman can readily devise a constructive self-analysis chart. Qualities can be selected and illustrations can be jotted down to guide one in rating himself. For example, the following qualities, and illustrations for rating, can be used:

DEPENDABILITY

Outstanding: skillful in dealing with many types of people and in handling numersecuring information or help when necessary in order to perform the duties within a stated time.

Deficient: have no sense of duty, fail to keep promises, undermine associates.

Outstanding: skilful in dealing with many types of people and in handling numerous kinds of situations; highly adaptable and courteous.

Deficient: prejudiced, irritating, antagonize consciously and unconsciously.

INITIATIVE.

Outstanding: consistently plan and carry out work on own responsibility; undertake some unique projects.

Deficient: seldom embark on a new piece of work until told to do so and told how; do work in a routine way, scarcely ever devising an improved

method of doing it.

Qualities such as "utilizing knowledge already acquired," "securing technical knowledge related to your field of work," and a host of others can be incorporated into one's self-analysis chart.

MAN OR MOUSE?

The variety of characteristics found in people is amazing. A typical individual possesses both positive and negative traits. Some people are exceedingy aggressive, others are almost spineless. Do you give in to pressures to which you should not yield? Do you compromise with principle? Do you move along routinely from day to day or do you plan ahead and try to achieve your plan? Are you a rubber stamp? Or are you one who thinks for himself? In short, are you man or mouse?

Failure does not squeeze the spirit out of a person who has fortitude and does not keep him down, for he is a man. Countless numbers of persons who contributed greatly to human welfare met defeat, but rose above it. Abraham Lincoln persisted in spite of many reversals, as is indicated in the following eloquent statement which is discussed in the August 8, 1938 issue of Lincoln Lore:

When Abraham Lincoln was a young man he ran for the legislature in Illinois and was badly swamped. He next entered business, failed, and spent seventeen years of his life paying up the debts of a worthless partner. He fell in love with a beautiful young woman to whom he became engaged-and then she died. Entering politics he ran for Congress and was badly defeated. He then tried to get an appointment to the United States Land Office, but failed. He became a candidate for the United States Senate and was badly defeated. In 1856, he became a candidate for the vice presidency and was again defeated. In 1858, he was defeated by Douglas. But in the face of this defeat and failure, he eventually achieved the highest success attainable in life, and undying fame to the end of time.

Do you take a positive view and ask for the things you want when you are prepared for them? Or do you take the negative and fail to make a move toward obtaining what you want? To those who ask, a large number of the best things in life, and quite a few of the material, too, are given.

Unfortunately, many people respect only those who demand. Being a demander should not place a halo over anyone. Nevertheless, the person who has the foresight and courage to ask for things he really wants and asks for them in an appropriate way at the time when the request makes sense can be regarded as a man. He certainly is no mouse.

What is my attitude toward others with whom I deal? Do I act as though I am "a mighty man," or do I act as though I am a mouse? Or, do I attempt to act like a normal, reasonable, intelligent person, who is considerate and who asks consideration? These are relevant questions when one is doing a bit of self-examination.

If you consider yourself to be "a mighty man" (or a mighty woman), spend an hour on your back under the open sky on a clear night. Try to count the stars and to visualize the size of the universe. Or spend fifteen minutes at Times Square in New York between 7 P.M. and midnight when the streets are dry. In either instance, you will realize quickly, and uncomfortably, that you are not as indispensable as you had wished.

If you suspect that you are a mouse, study the characteristics of one whom you consider to be every inch a man (or woman) of an admirable type. Attempt gradually, through study of those characteristics, to assume some of them as your very own.

WHAT THEY SAY ABOUT YOU

Analysis of evaluations made of you by others, which come to your attention, is an important part of constructive self-analysis. The evaluations made by others come to an individual directly and indirectly; orally and in writing. Someone tells you what he thinks of you when he meets you on a street corner, or tells someone else who in turn tells you. The comments may be merely complimentary, or insulting, or they may be constructive.

Perhaps someone writes you a letter, or publishes an editorial about a speech which you made or a program which you launched, or publishes a review of an article which you wrote. These evaluations by other people range from flattery ("you're a great fellow") to sarcasm ("he's a louse"), with truth between the extremes. They are worth examination. They are made in a spirit of objectivity, in a spirit of studied blandishment, in a spirit of idle, meaningless words, and in a spirit of destructiveness.

It is natural to glow in the warmth of favorable evaluations made of you by others, and to be irritated by the unfavorable. Examine both and profit by your scrutiny of them. If one accuses you, examine that accusation. If you find yourself guilty, then the accusation was deserved. If you find the accusation to be false, it can be instructive to some extent. It may indicate a possible future pitfall to guard against. If someone labels you as being envious and after searching yourself you believe that you are not envious, throw off the accusation. Do not let it irk you. But let the accusation be a reminder of the human fraility of envy. With this reminder far back in your consciousness, the accusation will have been instructive.

If a preponderance of evaluations concerning you, which come to your attention, are flattering, or if most of them are made in a spirit of destructiveness, and are not analyzed objectively by yourself, they can do great damage. Like the drip from the barn which caused an entire hillside to erode over a period of years, these evaluations, which reach us directly

and indirectly, can twist us out of shape unless we examine them in an unbiased way and use those which are worthy of consideration. The remainder should be discarded and forgotten except for their value in pointing to possible future pitfalls.

How Good Are Your Interpersonal Relations

The New Dictionary of Psychology by Philip Lawrence Harriman, published by the Philosophical Library in 1947, defines interpersonal relationships as "the reciprocal influences which persons exert upon one another in primary (face-to-face) social groups." The term interpersonal relationships refers to the interaction between personalities. Your interpersonal relationship with another is excellent when you suggest to him that he budget his money in a systematic way, knowing that until then he had no thought of doing so, and he responds with genuine enthusiasm by saying: "Yes, that is a good idea. I think I will start budgeting right now." The relationship between you and him at the time of the suggestion was one in which the interaction caused him to see value in your suggestion and aroused his desire to seize upon the suggestion in order to profit from it.

Often one's interpersonal relationships will produce an indirect rather than a direct interaction, as for instance, when your suggestion to another person causes him to start mulling over a problem until he arrives at several possible solutions and selects one. Interpersonal relationships cause negative as well as positive, and harmful as well as helpful interactions. A person who reproves another in a tactless way may set in motion an interaction which causes open defiance on the part of the person being reproved. In order to measure the effectiveness of our interpersonal relationships it is good to ask searching questions occasionally, such as: "Am I the kind of person whom others like? whom they respect? If not, why not?"

In Chapter 9, above, entitled "A Work-a-Day World," reference was made to the importance of getting along with people. If our interpersonal relationships are reasonably good, we will get along reasonably well with people. To get a reliable estimate as to how good our interpersonal relationships are, we must examine many of our personal characteristics. This

can be done by answering questions such as the following:

How honest am I in dealing with others?

Am I a pleasant or a sour person? How courteous am I?

How much of a sense of humor do I have?

Do I have patience with others at times when patience is necessary?

How well do I reprimand another when it is my duty to reprimand? Do I control my temper or do I frequently lose self-control when dealing with others?

To what extent do my exhortations bring added insight to the people to whom they are directed?

Giving commendation which is meant and deserved improves one's interpersonal relationships enormously. "Spoken at the right time, in the right way—There's Magic in a Word of Praise." These 16 words form a combination of title and condensation which introduces and indicates the substance of the lead article in the August 1952 issue of The Reader's Digest. Written by Fulton Oursler, the article extols the value of discreet commending, particularly when done in ways which are original. He concludes the article with the following poetic thoughts: "As the painter, the musician and all other artists find joy in giving beauty to others, so anyone who masters the art of praising will find that it blesses the giver quite as much as the receiver. It brings warmth and pleasure into common-places and turns the noisy rattle of the world into music. Something good can be said about everyone. We have only to say it."

If a person thinks that he is the acme of perfection, then he and his interpersonal relationships are hopeless. Some people seem never to be aware of their weaknesses. There is hope for a man as long as he realizes that he may be tramping on someone's toes and realizes that in dictating to others he may be obnoxious and that other people, too, know as much as he does about some things.

If we are not securing co-operation from others, it is well to do some self-analysis to see if the reason for the nonco-operation lies within ourselves. Our attitude toward others may be haughty or condescending. In either case interpersonal relationships cannot be expected to be good.

After discovering within ourselves impediments to good interpersonal relationships, we should begin to remove those impediments. This process, however, should be carried on with discretion. If you conclude that you lack a sense of humor, then attempts to tell funny stories everywhere you go may make you look ridiculous and very much out of character. If you decide that your personality is on the sour side and that you will correct it by smiling broadly, as Andrew Carnegie apparently did for artists and photographers, you may begin to look a bit like a grinning Cheshire cat.

Many of the things in other people which you find pleasing are likely to be pleasing to them when found in yourself. Similarly, many of the things in other people which disgust you are likely to be disgusting to them when found in yourself. This simple principle is a useful guide for improving one's own interpersonal relationships.

No Adequate Substitute for Sincerity and Enthusiasm

One who lacks either sincerity or enthusiasm lacks qualities for which there is no adequate substitute. We do not quite trust the person who we believe is insincere, no matter how many good qualities he has. Nor are we much attracted to an individual who seldom exhibits a spark of enthusiasm. In Polonius' well-known farewell speech to his son Laertes, the following words ring as sharply and meaningfully today as they did when William Shakespeare wrote them approximately two-and-a-half centuries ago: "This above all—to thine own self be true, And it must follow, as the night the day, Thou canst not then be false to any man." (The Tragedy of Hamlet, Prince of Denmark, Act 1, Scene 3, lines 78-80).

Sincerity is a pearl of great value. With it one can face, confidently, many situations in life that he or she could not otherwise meet. A sincere person is open and above board. He is honest. Chicanery is no part of him.

An enthusiastic person is filled with life. His mind is active. He has interests. His enthusiasm is contagious. So often those who lack this contagion look down their noses at enthusiastic persons. Some people abhor enthusiasm. They do not have it! One with enthusiasm may be branded as being juvenile, or as being lacking in judgment. How differently those branders might comment if they themselves could but develop a bit of enthusiasm for something! What would life be like if everyone were as drab as those who almost completely lack enthusiasm, even though having good health.

A person without enthusiasm is a dull fellow, regardless of his age. Enthusiasm is a desirable quality at any age as long as it is directed toward things and persons worthy of it, and as long as the enthusiasm is held within the bounds of good judgment. How can one avoid catching at least a bit of inspiration from the enthusiastic light in the eye and the enthusiastic tone in the voice of a child, or of an aged person or of anyone else?

The frustrations of life, such as having numerous suggestions rejected, and the cynicism and other forms of negative personality of many people, tend to dull one's enthusiasm unless he or she guards it carefully by nurtur-

ing.

One who has dozens of admirable qualities, yet lacks enthusiasm or sincerity, or both, lacks that for which there is no adequate replacement. Without sincerity he fails to possess self-respect and the confidence of some whose confidence he needs. Without enthusiasm of a reasonable type, he will have difficulty in putting into use many of the things which he has learned in and out of school and in eliciting the support of other people in carrying out plans which he formulates.

THE CORROSIVENESS OF FEAR AND WORRY

Corrosion eats or wears away by degrees. It is a gnawing sort of action. It is destructive. Fear and worry are just as corrosive to men and women as acids are to metal. Shakespeare said "Care is no cure, but corrosive." Fear and worry have devastating effects.

Although fear and worry are closely related, they differ sharply in some respects. An external threat, such as an unusually loud noise, causes fear. On the other hand, worry is stirred up by imaginary threats—the possibility of a friend being involved in an airplane crash, or by feelings of guilt. Fear

causes us to do something to ward off possible consequences. When we are frightened by a loud noise almost directly behind us, we may jump to one side or run forward to get away from the immediate vicinity of the disturbance. Worry, however, causes us to do almost nothing but resign ourselves to the imaginary threats.

Donald A. Laird, on page 342 of his book entitled *The Technique of Personal Analysis*, Whittlesey House, McGraw-Hill Book Company, Inc., 1945 lists the following well-known persons and fears that bothered them:

Augustus (Roman Emperor), Mohammed, Martin Luther, and Mark Twain-afraid of thunder.

Robert Bruce (King of Scotland), Henry III of France, Napoleon, Marie (Queen of Rumania), and Kaiser Wilhelm-afraid of cats

John Bunyan-afraid of women

Peter the Great-afraid of bridges

Horace Greeley and Joseph Pulitzer-afraid of noises

Alexandre Dumas-afraid of high places

John L. Sullivan-afraid of rats

Mussolini-afraid of small rooms

Fear is a primary emotion. The fear tendency is inborn. Nevertheless, many of our fears are acquired (1) because of oral warnings, by other people, and warnings in printed matter (2) by observation, through most of our lifetime, of fear responses in other people, particularly adults, and (3) by increasing our knowledge in many directions and thus becoming aware of potential dangers not realized in childhood.

A baby has few fears. For instance, until more than two years old a human being is not afraid of snakes. A child having no fear of thunder and lightning may acquire this fear by seeing how frightened some adult becomes during a thunder storm. As the child grows up and assumes adult responsibilities, he sees the need for caution in many things. He may have a great many fears by the time of reaching middle age.

Fear is not altogether devoid of good effects. For instance, it is the only thing which causes some people to drive an automobile safely. They fear being injured or arrested. Some people refrain from planning and carrying out serious crimes only because of fear that they will be caught and punished. In a dangerous situation, such as rescuing people from a burning building, absolute fearlessness is a matter of poor judgment.

Adults have fears but usually are skillful in hiding them. The hiding does not solve the problem. It may intensify the fears. Excessive fear of one thing or a fairly deep seated fear of each of a dozen trivial things is highly corrosive. Self-examination ought to result in eliminating fears which are trivial, such as fear of the dark, and fear of cats, thunder, and dentists, but it should not produce a boldness which causes one to throw caution to the winds when driving an automobile, when walking on high ledges, and the like. Self-examination should lead one to facts concerning the things which he or she fears, and to rational conclusions.

Just as fear is corrosive, so is worry. In many cases worry is an imaginative substitute for real action, and a poor substitute. In the cases where worry is a substitute for action, the worry is likely to disappear when action is taken. One can make himself feel wretched by worrying about a speech which he is scheduled to give. If he takes action by preparing the speech thoroughly, he may find that preparing it is an enjoyable experience. Such action is the logical one and pushes worry aside. When the time for making the speech arrives he will be ready.

Constructive self-analysis is not an introspective process of a worry type. Instead, it is an introspective process which seeks to eliminate such defects as the tendency to worry. Concern is an evidence of good judgment. Worry is not. Concern should cause preventive or remedial action. Worry does not.

Worry has been branded as the greatest plague of modern times. The claim has been made that forty per cent of one's worries are about the past, fifty per cent about the future, and only ten per cent about current matters. This would seem to indicate that the person who occupies himself or herself with much constructive activity will live in the present and be almost free of worry.

If, when you conclude that something you have been worrying about no longer warrants worry, you then start to worry about something else, you probably have the *habit* of worrying. When worry becomes a habit it be-

comes an ever present enemy.

Some people abuse their imagination by seeking things to worry about. There are those who seem to make of worry a form of indoor sport. People with much to do have little time to worry, especially about things that are

not likely to occur.

Often worry is completely unnecessary—a borrowing of trouble. Why worry about the safety of a friend who takes a trip by rail on a streamliner which has an excellent safety record? Or, why worry about the possibility of falling down a slippery stairway some day and breaking a few of your bones? Being reasonably cautious when walking on stairways that are slippery and being reasonably cautious when walking anywhere else will be sufficient.

If worry is being caused by feelings of guilt, then decisions should be made concerning past actions and present temptations. Otherwise the

worry is almost certain to continue, and perhaps intensify.

Constant worry causes physical changes in the human body. It is the cause of much poor health. Blood pressure and the flow of digestive juices are affected by prolonged worry.

It is easier to tell someone to stop worrying than to free yourself of the worry habit once it has fastened itself upon you. But time used in pondering over the following seven questions can be helpful:

1. Why am I worrying today?

What action can I take that will cause the source of my present worry to disappear? 3. Are the things which I worry about from day to day worth the time that I give to them?

4. Do I use worry as a means of formulating a plan of action and then put the plan into operation and discard the worry, or does my worrying go no further than contemplation which is of a distressing type?

5. Do I have the worry habit?

6. How can I improve the way in which I do my job so as to eliminate at least one cause of worry?

7. Are there leisure time activities that can help me divert attention from worry?

THE POWER OF THINKING

In Chapter 6, above, dealing with the ability to express oneself by speaking and writing, reference was made to the necessity for clear thinking. In that chapter it was pointed out that thinking consists of bringing a matter under consideration and reflecting upon it, and that, when a conclusion is reached as a result of thinking, there is an exercise of powers of judgement.

Human progress is based on thinking. The heat-giving quality of oil may have been discovered by an accidental fire, but the internal combustion engine, which depends on oil, was developed as a result of experiments guided by thinking. It is the power of thinking that makes useful inventions and all other forms of progress possible. Without thinking, legal codes of great worth, as well as significant achievements in science and business, would be impossible.

Thinking requires effort. Most people tend to do a task in the same old way to which they have become accustomed, rather than to think until finding an improved way to do the task. A large percentage of the world's population does a relatively small amount of high-level thinking. This is due partly to the fact that thinking requires effort and partly to the fact that comparatively few people develop their potential ability to do sustained thinking. This source of power, sustained thinking, is hard work. It causes us to reach out, rather continuously, to reflect on one thing and then on another, rather than to accept conditions as they are and to go about life routinely. But many people prefer to sidestep the job of thinking. They depend on others to think for them. If you have not already developed the habit of thinking your problems through, then a bit of self-analysis should point to this lack and cause you to do something about it.

Those men and women who make it a practice to think deeply and clearly become leaders. This results from the dual fact that human progress is based rather largely on thinking and that relatively few people do much thinking because it requires effort and is not an absolute necessity of life.

Those who think are able to interpret facts. They help others to think, for they place thoughts in the minds of other people. As inventors, philosophers, writers, or as leaders of men on construction jobs, in factories, in offices, and the like, they each shape the thinking of few or many people.

Thinking enables one to avoid repeating one's mistakes and to discover the fallacies in statements presented to him. Thinking is the chief means

of making one free from superstition and from bad habits.

Self-analysis inquires into whether or not you think for yourself or whether you have a low sales resistance and yield easily to persuasiveness. One who has had the benefit of twelve years spent in elementary school and in high school should be able to think for himself. He should be his own judge. By doing a bit of thinking each day beyond his usual amount he will soon increase his ability to tell the difference between facts and misinformation. One should learn to question statements, not as a matter of discrediting the valuable, but as a matter of arriving at the truth. It is also advisable to view the actions of one's self and others critically as a means of determining motives, or discovering best ways of performing a task.

Do you accept sweeping generalizations as soon as they come to your attention, or do you think about them and then decide to accept or reject them? Do you avoid basing your thinking on emotions? Have you thought out a philosophy of life for yourself which you find to be realistic and satisfying? Have you achieved intellectual and emotional maturity? Do you make use of the technical knowledge which you have acquired? Do you concentrate easily when you desire to do so? Wishing does not accomplish these things, but thinking does when it is combined with determination to carry out the conclusions to which your thinking leads you. There is power in thinking!

THE VALUE OF DECISION

Ability to make up your mind is an important factor in success. To be able to make a "yes" or "no" decision and stick to it is a valuable asset. Indecision causes one to hang in mid-air. In his book entitled Roads To Radiant Living (Fleming H. Revell Company, New York, 1951), Charles L. Allen writes as follows:

In counseling with many people, I have come to believe that one major cause of failure, unhappiness, and tension is fnability to make a clear-cut decision. David Starr Jordan [1851-1931, naturalist and president and chancellor of Stanford University] used to say, "The world turns aside to let any man pass who knows where he is going." The ability to make up your mind inspires self-confidence, it gives you inner power and it commands the respect of your fellow men. (Page 47).

Decisions are required in matters varying from simple routine to problems of great significance. In choosing one necktie and rejecting another in the morning when dressing, a decision is made. At the other end of the scale there are matters of long-range importance which call for decision as, for instance, marrying, buying a house, or resigning from your job to accept a position in a distant city when your children are in junior high school.

There are so many psychological and physiological factors involved in making decisions that it is difficult to classify decisions by types. In one hour a man may make a decision with the purpose of pleasing his employer, a second to please his mother-in-law, a third to coincide with his sense of intellectual balance, a fourth to satisfy one of his immediate desires, and a fifth to satisfy his conscience. William James, in the 1892 abridgement of his *Principles of Psychology*, spoke of five chief types of decisions (pages 429-434, *Psychology*, Henry Holt and Company). Even though many advances have been made in the field of psychology since the time of William James, his five chief types of decision are worth summarizing briefly. They are as follows:

 The reasonable type. The arguments for and against the matter to be decided "seem gradually and almost insensibly to settle themselves in the mind and to end by leaving a clear balance in favor of one alternative, which alternative we then adopt without effort or constraint."

2. The accidental type, determined by external influences. This type is characterized by drifting "with a certain indifferent acquiescence in a direction accidentally determined from without, with the conviction that, after all, we might as well stand by this course as by the other, and that things are in any event sure to turn out sufficiently right."

3. The reckless type. Here, too, the decision is accidental, but because of the person's own feelings. Unstable individuals, and leaders like Napoleon, may frequently make a tumultuous (and sudden) decision and throw themselves into it vigorously.

4. The sudden type. This type of decision is made "when, in consequence of some outer experience or some inexplicable inward change, we suddenly pass from the easy and careless to the sober and strenuous mood, or possibly the other way. The whole scale of values of our motives and impulses then undergoes a change."

5. The effort type. This type of decision is characterized by a feeling of effort. Something is sacrificed, there is a sense of duty involved. James speaks of this fifth type as "a desolate and acrid sort of act, an entrance into a lonesome moral wilderness."

A paragraph from James concerning deliberation, and indecision, is of interest. It states:

The process of deliberation contains endless degrees of complication. At every moment of it our consciousness is of an extremely complex thing, namely, the whole set of motives and their conflict. Of this complicated object, the totality of which is realized more or less dimly all the while by consciousness, certain parts stand out more or less sharply at one moment in the foreground, and at another moment other parts, in consequence of the osillations of our attention, and of the "associative" flow of our ideas. But no matter how sharp the foreground-reasons may be, or how imminently close to bursting through the dam and carrying the motor consequences their own way, the background, however dimly felt, is always there as a fringe . . .; and its presence (so long as the indecision actually lasts) serves as an effective check upon the irrevocable discharge. The deliberation may last for weeks or months, occupying at intervals the mind. The motives which yesterday seemed full of urgency and blood and life to-day feel strangely weak and pale and dead. But as little to-day as to-morrow is the question finally resolved. Something tells us that all this is provisional; that the weakened reasons will wax strong again, and the stronger weaken; that equilibrium is unreached; that testing our reasons, not obeying them, is still the order of the day, and that we must wait awhile, patiently or impatiently, until our mind is made up "for good and all."

This inclining first to one, then to another future, both of which we represent as possible, resembles the oscillations to and fro of a material body within the limits of its elasticity. There is inward strain, but no outward rupture. And this condition, plainly enough, is susceptible of indefinite continuance, as well in the physical mass as in the mind. If the elasticity give way, however, if the dam ever do break, and the currents burst the crust, vacillation is over and decision is irrevocably there. (Pages 428-429).

Making decisions is one of the prime requisites of life. In driving a car, some decisions must be made quickly, some of them exactly right, in order that an individual may survive. The immediate and correct decision to put on the brake, or to accelerate, or to turn the steering wheel clockwise or to turn it counterclockwise prevents innumerable automobile accidents. Indecision in driving can easily be fatal.

Life is not very satisfactory for the person who has persistent difficulty in making up his mind. Many questions can be settled by a single "yes" or "no." The characteristic of decision enables one to settle a matter when faced with the necessity for doing so, and then, to carry the decision into effect. The habit of regretting a decision once it is made, injects complications and undermines one's power of decision.

Failure to make a decision after having sufficient time to consider the relevant facts is a weakness. No good comes from the habit of indecision. All of us need to make quick decisions. We are also faced with situations which call for much consideration before dismissing them from our minds. In either type of case we must decide in order to dispense with the matter satisfactorily. Ability to make proper decisions, and quickly, causes one to be valuable to an employer. Executives are paid to make decisions. Those persons who are indecisive are not likely to be asked, year after year, to handle assignments involving weighty responsibility.

In many matters it is better to make a decision within fifteen minutes than to delay and consider for several days. Extended consideration of a particular matter may be nothing more than vacillation, a sort of see-sawing. Being indecisive about one matter of minor importance may cause delay in giving attention to a half dozen others which need to be decided. One's indecision affects his life somewhat like a vacant place on an assembly line affects production in a factory.

But not all decisions should be made quickly. Think and then decide if the matter requires thinking. Even though one has a high degree of mental alertness and can perceive the essentials quickly, one cannot always make good decisions on the spur of the moment. Everyone is faced with some matters which require mulling over for a time before making a decision. Do not hesitate to delay an important decision until the next day. You may need a bit of time to assemble and evaluate facts which are pertinent to the decision. If you are feeling tired or ill or are depressed, postpone the decision until morning if it can wait that long so as to bring your best thinking into it.

In most instances little is to be said in favor of delaying a decision day after day. However, the matter of whether to move from the city to a suburb, or vice versa, is one that can appropriately be decided almost any time unless you have a definite offer today for your house or find for sale one which attracts you. On the other hand, considering for several years whether or not to take an evening school, correspondence, or extension course will probably result in not taking it at all.

Self-confidence is a mighty factor in success. A person who has confidence in himself will not hesitate to make important decisions and to carry them into effect. One who accomplishes much must attempt much and is

required to make weighty decisions.

Do not be chagrined if occasionally you make the wrong decision. Analyze it to see why it was wrong. Try to make a good decision next time, but decide rather than falter. The making of important decisions develops judgment if those decisions are preceded by thinking and if the poor ones are given your attention. The quality of your decisions should improve as you continue to make important ones. As in many other things, the ability to decide well requires practice. We do not obtain that practice by hesitating and then failing to decide.

After making a decision, conditions affecting it may change and additional facts concerning it may come to your attention. Therefore, a change

of decision is sometimes in order.

The person who has a broad education and a clear-cut philosophy of life has two assets which are valuable to him when confronted with broad problems of life, personal and public, which call for decision. A man or woman who has held a particular job for several years may very well have acquired sufficient technical knowledge to make the day-to-day decisions required by the job. On the other hand, something different is involved in making broad decisions in life, such as those dealing with the causes to which you will be loyal, the types of persons whose advice you will seek, and the kind of teachers and curriculum you want for the schools in your community. The men and women who fail to make these broad decisions well are apt to flounder during their leisure time, use it harmfully, or follow unswervingly a local demagogue or a national totalitarian leader if one arises. In contrast, men and women who have the twin assets-a broad education, and a clear-cut philosophy of life (which philosophy they have accepted on their own free decision)-are likely to be able to cope decisively and reasonably well with almost any situation which they face on or off the job.

Deciding to use what you have learned is one of the most important decisions that you can make. One should stick to such a decision resolutely. When you learn something that seems to have real value, determine how you can use it. The decision to use what you have learned will fix a life pattern just as deciding to be honest fixes a pattern which protects you from

temptations.

SELF-MASTERY IS NECESSARY

To master oneself is the greatest mastery. Seneca, the Roman philosopher referred to at the beginning of this chapter, stated this thought in the following concise sentence: "The greatest of all dominions is dominion over self." (See page 253, volume II, Seneca's Letters to Lucilius, translated by E. Phillips Barker, and published in Great Britain, in 1932 by Oxford University Press). Centuries later Thomas Jefferson wrote from Monticello, on May 21, 1816, to Francis Eppes as follows:

Whenever you feel a warmth of temper rising check it at once, and suppress it, recollecting it will make you unhappy within yourself and disliked by others. Nothing gives one person so great advantage over another as to remain always cool and unruffled under all circumstances. (Page 242, volume XIX, 1903. The Writings of Thomas Jefferson, Library Edition, issued under the auspices of the Thomas Jefferson Memorial Association.)

A person cannot be expected to master himself to the point of extending his life to his 150th birthday, but he can be expected to master himself in many other ways. Are you master of yourself when faced with the impulse to be angry or fearful or when confronted with a tendency to worry? In those situations personal mastery can be attained.

Think about a weighty matter at hand and reach a decision concerning it, rather than worry. This is an essential part of self-mastery. How well do you control your moods? Will-power is necessary in order to practice self-control under trying circumstances. Anyone can lose his temper and become angry, some people in a mild and others in an extreme manner.

Anger, varying from slight outbursts to rage, is a primary emotion found in a baby at birth. Frustration is a main cause of the exhibition of temper. Frequently the person who becomes angry and exhibits temper is dissatisfied with himself but may blame others, or the hammer with which he struck his finger, or the chair that he bumped his shin against in the dark.

Donald A. Laird, in his book entitled *The Technique of Personal Analysis*, mentioned above in this chapter, lists on pages 358-359 thirty-two well-known men and women who had a lifetime job controlling their tempers, some of them succeeding! Among the thirty-two were the following: John Adams, Andrew Jackson, Theodore Roosevelt, and Woodrow Wilson, Presidents of the United States; Elizabeth, Queen of England from 1558 to 1603; Ludwig van Beethoven, German composer; Louisa May Alcott, American author of *Little Women*, *Little Men*, and other books; and James J. Hill, American railroad builder.

Following the line of least resistance is not the way to self-mastery or to any other form of self-improvement. Severe circumstances, such as being immersed in grief, being insulted stingingly, or being extremely dissatisfied with oneself, test a person mercilessly and indicate the extent to which he possesses self-mastery.

WHAT ABOUT A YEARLY INVENTORY?

Constructive self-analysis requires one to ask himself how well he is doing the things which he is doing, and to what extent he is doing the worthy things which he is capable of doing. There is merit in conducting this interrogation in a comprehensive way once each year, in addition to doing it more or less continuously during the year.

In constructive self-analysis it is desirable to take into consideration imfnediate, and long-range objectives, and to measure one's present, expected, and past results against those objectives. When an immediate objective is attained, the lack of additional objectives may cause a lack of progress. By evaluation it is possible to determine how much we have advanced in various directions during the last year, and to obtain a fairly definite idea as to where and why we have failed in terms of an objective still not attained. Evaluation helps one see the need and the opportunity for improvement. This self-evaluating enables one to realize what he has already accomplished. It also enables him to recognize at least some of the things that he can yet do if he will try. Through evaluation one can tell, frequently, which characteristics, habits, and skills need to be scrutinized most thoroughly. Insight as to how to do that which appears necessary to be done is secured through this self-analysis. Occasionally it is good to obtain evaluation of yourself by someone else and compare it with your own analyses, in order to test your own evaluation.

Even though self-analysis should be more or less continuous, such a time as the end of a calendar year, a fiscal year, or a school year is a particularly good time to make a comprehensive personal inventory. In making a yearly inventory one can gather pertinent and accurate data about oneself and evaluate these data. A yearly inventory can well center around such questions as the following twelve:

- 1. Do I use my education on and off the job and am I adding to it?
- 2. Have I developed the art of straight thinking without becoming rigidly insistent on my ideas?
- 3. Am I taking reasonably good care of my health and personal appearance and am I protecting myself against obvious safety hazards?
 - 4. Am I spending the bulk of my life on activities which are socially constructive?
 - 5. Am I working for something more important than wages, salary, or profit?
 - 6. Have I found, or am I coming close to finding, my niche in the work-a-day world?
- 7. When making suggestions, do I get at things which are basic and which I have already thought through carefully?
- 8. Do I appeal to another's reason or do I command and demand in dealing with him?
 - 9. Have I developed the art of self-control without becoming as limp as a dishcloth?
 - 10. Am I obtaining pleasure and relaxation from my leisure time?
- 11. Have I developed the art of relaxation without becoming unproductive while relaxing?

12. Do I examine myself frequently with the purpose of correcting to a reasonable extent defects in attitudes and conduct and failure to use desirable abilities?

THIS WE SHOULD EXPECT:

That men and women will form the habit of examining themselves objectively (1) in order to observe the extent to which their education is contributing to constructive and happy living, and (2) to determine how they can further make use of both innate and acquired abilities and develop, within reason, essential abilities and desirable attitudes and standards of conduct which they as individuals still lack; and that they will carry their determinations into effect.

It Adds Up to This

Problems Ahead

Battle for the Mind

An Inventory Is Necessary

Constructive Living Rather Than Non-Constructive

Plato Rather Than Spencer

Global Appreciation

Schools Must Set the Pattern

New Horizons

NLY through providing education to a large majority of the people in each populous country and education of a type which the best thinkers in each of those countries, meeting in international conference, consider to be balanced, will civilization, and mankind itself, avoid almost complete destruction. Furnishing education of such a high type and on such tremendous scale is the challenge of the twentieth century. Unless men and women everywhere are taught to think with at least some degree of objectivity, to work for the joy of accomplishing things which are socially useful, and to require justice on the part of themselves and others, we need expect nothing at all of education.

It Adds Up to This

THE flowering of a culture that will assure peace between nations and economic security for the industrious individual and that will make other fruits of education available on the scale which they should be will require throughout much of the world:

 the drive, inventiveness, and organizing ability which is characteristic of the United States and the freedom which enables these

priceless qualities to exist, and

a great increase in business and labor practices which produce the maximum social value and a reduction of those which emphasize

the mere procuring of material wealth.

The future is a big question mark. Many parts of the world are still dominated by superstition or by cupidity or both. Some countries are largely disease-ridden. Education should teach each generation how to enjoy life and pass on to its children a world better than the one it found. Thus each generation by means of education should have its question mark reduced and should be taught how to meet it reasonably well.

PROBLEMS AHEAD

During the next few decades it will be necessary for people in most parts of the world to face complex social and economic problems of a type which did not exist a century ago. The problems ahead revolve around man's eternal struggle for food, clothing, shelter, prestige, and happiness. These age-old problems have taken on a somewhat different form than they ap-

peared in only several decades ago.

World Wars I and II speeded up technology and created significant social and economic changes. Machines rapidly replaced workers in many operations and, on numerous other operations, made workers far more productive than previously. Larger factories were built. The stream of goods and services increased tremendously. Large cities like New York, Chicago, Philadelphia, and Los Angeles became larger. For example, the Decennial Census of 1910 showing the population of cities, and the Decennial Census of 1950 showing the population of metropolitan areas reveal the following:

	Population in 1910	Population in 1950 (Metropolitan area)
New York	4,766,883	12,911,994
Chicago	2,185,283	5,495,364
Philadelphia	1,549,008	3,671,048
Los Angeles	319,198	4,367,911

While the large cities were becoming larger, many towns and small cities grew in population by leaps and bounds. For example, Dallas, Texas, had a population of 92,104 in 1910. In 1950 Dallas had a population of 434,462, an increase of almost 500 per cent in forty years! Furthermore, its metropolitan area population increased from 398, 564 in 1940 to 614,799 in 1950, a gain of 54.3 per cent in a decade. While towns and cities were growing rapidly, the means of transportation and communication increased and became much more speedy and efficient than in earlier years. Labor saving devices were introduced in the home in rapid succession. Rural areas became electrified and mechanized. Commercial recreation facilities increased phenomenally. Child labor was virtually abolished. The typical work week was reduced. People became highly mobile and had much free time on their hands. Labor unionism swung into high gear. These changes were particularly characteristic in the United States, but to some extent were typical of many parts of the world.

With the increase of man's productivity there still remain countless fundamental unsolved social and economic problems. In the United States hundreds of thousands of people deserve more than they have in the way of food, clothing, housing, and medical care. In much of South America, Europe, Asia, and Africa the situation is far worse.

Throughout the world a large percentage of adults fear the future. They fear that they will not be able to hold what they have. Businessmen fear that the balance of international trade may go against them. Workers fear widespread unemployment. Nations distrust and fear each other. As population increases and as technology brings widely separated parts of the world relatively close together, present problems will become more acute than now, and new problems will evolve.

"Growth of Population in the World" is the title of a provocative article by S. Swaroop, Chief, Statistical Studies Section, Division of Health Statistics, in World Health Organization of the United Nations. The article is found on pages 162-169 of Volume IV of Epidemiological and Vital Statistics Report, World Health Organization, 1951. The article states that the world's population is increasing at the rate of nearly 60,000 per day, and estimates that the world's population has almost quadrupled in the last three centuries, and that in the last century two thirds of this increase has taken place. The article also points out that during the last fifty years the world "has added more persons than actually were living in 1900 in the whole world excluding Asia, and the rate for the twentieth century shows world population to be increasing as never before." (Page 167). Table II of the article indicates that from 1900 to 1949 the population of Africa increased 41 per cent, of North and South America 112 per cent, of Asia 49 per cent, of Europe 36 per cent, of U.S.S.R. 59 per cent, of Oceania 100 per cent, and of the entire world, 53 per cent.

Table 1. A, page 111 of the United Nations' Demographic Yearbook, 1954 shows world population by continents, in round numbers, as follows for 1953:

forld	2,547,000,000
Africa	208,000,000
Northern America	177,000,000
Middle America	55,000,000
South America	119,000,000
Asia (exclusive of U. S. S. R.)	1,364,000,000
Europe (exclusive of U. S. S. R.)	402,000,000
Oceania	14,000,000

The 1954 issue of the *Demographic Yearbook* seems not to give a population figure for Russia but the 1951 issue, on page 103, gives it as 193,000,000. The above total for the world population would indicate that Russia's

population in 1953 was approximately 208,000,000.

W

A large part of the world's population is illiterate. In United Nations, Statistical Yearbook, 1949-50, table 163, pages 486-494, relates to illiterate population. The table shows that 85.2 per cent of the population of Egypt, ten years of age and over, was illiterate in 1937. Other data selected from the table are as follows:

El Salvador, 72.8 per cent of the population eight years of age or over, illiterate in 1930

Brazil, 56.7 per cent of the population ten years of age and over, illiterate in 1940 India, 90.9 per cent of the population ten years of age and over, illiterate in 1931 Korea, 68.6 per cent of the population ten years of age and over, illiterate in 1930 Turkey, 79.1 per cent of the population ten years of age and over, illiterate in 1935 Bulgaria, 31.4 per cent of the population ten years of age and over, illiterate in 1934 Greece, 40.8 per cent of the population ten years of age and over, illiterate in 1931 Italy, 21.6 per cent of the population ten years of age and over, illiterate in 1951 Portugal, 48.7 per cent of the population ten years of age and over, illiterate in 1940 Yugoslavia, 45.2 per cent of the population 11 years of age and over, illiterate in 1931.

The January 1945 issue of *The Annals* of the American Academy of Political and Social Science was devoted to the subject "World Population in Transition." An article in the issue was entitled "Population and Per Capita Income." In the article Joseph J. Spengler states "Income data, supported by nutrition studies, suggest that the incomes of more than half the world's population are in the neighborhood of bare subsistence." (Page 191):

In 1949 Princeton University Press published a volume entitled Studies in Population. The volume is comprised of papers dealing with five subject matter areas, one area being entitled "Resources for the World's People." In that area a paper by Warren S. Thompson of Miami University is included. Dr. Thompson is a leading authority on world population trends. His paper is entitled "Some Reflections on World Population and Food

Supply During the Next Few Decades." His reflections are not very encouraging. He points out that approximately sixty per cent of the people of the world live in backward areas where birth rates and death rates are high, where illiteracy is prevalent, and where work is done in a primitive manner. He also refers to the fact that political, social, and economic results of the application of science cause new problems. He warns the reader that the phenomenal possibility of science to increase food supply may, therefore, not result in most men being any better off several decades hence, than now. (Pages 80-92).

Among the problems which lie ahead and which must be faced are the following three:

- 1. The problem of guaranteeing a decent standard of living to an increasing population. With much of the population of the world underfed and with some of the remainder overfed, education should cause something to be done to balance the situation. Schools can assist in balancing the situation by developing technicians, by emphasizing research, and by directing attention to the urgent need for providing a decent standard of living for underprivileged groups.
- 2. The problem of educating people everywhere. In some countries most persons have fairly extensive educational opportunities. In many countries there are relatively few opportunities to secure either general or specialized instruction in large amount. Education, but not propaganda, is essential. Education which educates, and which educates almost everyone in every country, is needed. But it should not be forced on people by their national leaders, nor on one nation by another nation. Education for all is required now in order to avoid catastrophe.
- 3. The problem of educating people to want to produce for the common good. It is not so difficult to develop technical skills, such as the skills used by the forester in combating white pine blister rust, the skills used by the civil engineer in building a suspension bridge which spans a mile-wide river, or the skills used by the surgeon in reactivating a human heart, which, to all appearances, has ceased to function within the last few minutes. The developing of technical skills has been mastered to a surprising extent in the United States, England, Germany, France, and in some other countries. Education, however, must go much further than developing technical skills. Education must make people want to produce, and for the common good, rather than to demand. Education must shape such an attitude. It must develop the will to use for socially constructive purposes that which we have learned. The lack of a desire to produce for the common good throws a blight on the possibility for all to live in harmony and enjoy the fruits of education. Nevertheless, the shaping of this constructive attitude poses many difficult problems in any country, especially since a large proportion of the adult population resists the philosophy upon which the objective here described is based.

BATTLE FOR THE MIND

Clear thinking and honesty will be required in order to solve the large problems which lie ahead. Many persons seem disinclined to handle a major problem by the use of this dual combination. Pressure tactics are resorted to on every hand to influence one's thinking. The battle for the mind is much in evidence in matters great and small. Therefore, it is the duty of the school to teach students how to recognize truth through a process of fact-finding and reasoning. Schools furnish technical information, but that is not enough. The ability to think clearly and to separate facts from opinion and from misinformation is essential. Even experts in a particular field, who lack broad education and practice in reasoning about problems in fields other than their own, sometimes fall an easy victim of insincere persons who battle for the mind. Or, sometimes, those experts are controlled by sincere persons who have not reasoned clearly. Then, too, anyone who learns in school how to analyze propaganda may soon forget about being analytical when exposed to gossip and other common forms of unreliable information. At such times one may be inclined to lapse into the exercise of his own prejudices or to accept readily the news to which he is being subjected. How to prepare men and women to be alert so as to avoid deception is an important problem. Schools must do what they can to prepare the student to acquire the habit of thinking clearly, and, even more, to continue that habit after graduation. There is no greater bulwark against attempts to control the mind than teachers who teach us to think and to search for the truth.

If an individual depends on someone else to do his thinking, he is in danger of losing self-respect. Moreover, in following stray suggestions blindly, he may be led into acceptances and activities which are harmful to himself or others. To seek advice from someone you respect or to consult a recognized authority or the appropriate organization, in checking on the authenticity of a statement, is a completely different matter.

Throughout most of the world many groups, some petty, some powerful, some legal, others illegal, some brazen, some undercover, some good, and some bad, are each trying to dominate people in some way. Often the object is merely to compel the purchase of a 25-cent product. In some instances the object is to force people to accept totalitarian rather than democratic government, or vice versa. The battle for the mind reaches its largest and most sinister proportions in modern warfare. It is intense in psychological and also in shooting wars. Modern battles led by a group within one or more nations, are mainly battles for the mind.

Every day almost everyone does something or thinks something partly because he is urged by propaganda to do so. Propaganda is not always bad. It is a method used by salesmen, authors, editors, lobbyists, and others to influence the thinking and action of people. Propaganda has been used for centuries. It is carried on by means of conversations, speeches, newspaper editorials, magazine articles, books, radio and television pro-

grams, billboard advertisements, and the like. Professional and trade associations by the score, labor unions, women's clubs, civic and reform groups, and patriotic orders have nation-wide membership. Many of these organizations publish material for the purpose of influencing their members and the general public.

In a democracy, but not in a totalitarian state, any person is permitted to engage in propaganda. In the totalitarian state only the government speaks. There is an official point of view. None other is tolerated. Nevertheless, it is difficult to control men's minds. With all their power, dictators, in order to survive, still must consider the wishes of the people they rule. In a democracy, even though anyone may engage in propaganda, it is not always an easy matter for one person or for an organization to control the minds of many people. Yet, propaganda is so prevalent in large centers of population throughout the world that anyone will do well to analyze what he hears and reads.

In Chapter 5 of this book, entitled "How Well Do We Read?", four suggestions were made as to how one can analyze what he reads. Those suggestions are found in the section entitled "Evaluating the Printed Word."

In 1937 Clyde R. Miller of Columbia University, and others, organized the Institute for Propaganda Analysis. A pamphlet by Miller published in 1949 has the title What Everybody Should Know About Propaganda, How and Why It Works. In the pamphlet seven common propaganda devices are described. They are somewhat as follows:

1. Name calling

2. Use of glittering generalities

3. Use of testimonial (the propagandist gives a testimonial of his own for or against a race, person, product, and the like or has someone else testify)

4. Using the prestige of an organization or an individual, with the implication that there is a legitimate connection between that prestige and the idea, program, person, or product being promoted

Flattering people, often the less educated, so as to be hailed as one of them

6. Using facts and misinformation to give a false or misleading idea

Urging acceptance of an idea, program, person, or product on the basis that it is already being widely accepted.

Having an open mind is desirable so long as you subject to scrutiny whatever you permit to flow into it. An open mind which is not subjected to this caution is only a sponge. A person who opens his mind completely but who does not scrutinize what he hears and reads cannot hope to be master of his mind.

Unless one is master of his mind, he might as well be without it. Others will control many of those actions of his which only he should control. To be master of his mind, one must be grown-up, mature. He must be

conscious of the possibility of making life beautiful rather than sordid. He must know that there is advantage in living constructively and hopefully rather than living negatively and suspiciously. He must analyze what he hears and sees rather than be influenced by recency, quantity, or fluency. The person whose decisions usually reflect the viewpoint of those who have his ear just before he decides is not master of his mind.

H. A. Overstreet, in his book entitled *The Mature Mind* (W. W. Norton and Company, Inc., 1949) speaks much about mature and immature responses and about forces that shape us. He points out in a very general way the following three things that one can do to acquire a mature mind: (1) expect much of the adult years (pages 273-276), (2) associate "with groups that promote maturing" (page 280), and (3) "contrive a plan for the growth of the mind that has breadth and depth and continuity" (page 282). In the book, Overstreet gives the impression that a mature mind is a rarity.

Two paragraphs taken from Overstreet's last chapter are particularly worthy of notice in connection with this problem of the battle for the mind. Those paragraphs indicate that a person who is mature will not be pushed about by those who seek deviously to control one's mind. The paragraphs, taken respectively from page 273 and 292 are as follows:

Obviously, the whole issue of our human destiny comes back in the end to our individual selves. Profoundly as we are influenced by the institutions and customs of our culture—forces that took shape long before we were born—there is in all of us a margin for initiative. In some small way, or in some greater way, we can act maturely instead of immaturely. The sum of our mature acts, in each of us and in all of us, may make the difference between a world headed for destruction and a world headed for creative fulfillment.

Where there is no vision, we are told, the people perish. Where there is no maturity there is no vision. We now begin to know this. We realize that the evils of our life come not from deep evil within us but from ungrown-up responses to life. Our obligation, then, is to grow up. This is what our time requires of us. This is what may yet be the saving of us.

AN INVENTORY IS NECESSARY

From time to time it is necessary to take stock in order to weigh attainments against objectives. This is particularly true in education. Schools and school systems need to be scrutinized by the public in much the same way as the individual needs to examine himself. It is easy to forget the good things that schools are doing and it is possible to overlook defects that should be remedied in our educational systems.

The many elementary and secondary schools in the United States range from excellent to revoltingly poor. In the worst there is much unnecessary regimentation and lack of a proper setting for learning. Likewise American college and universities run a similar gamut. That is, some are distinguished centers of learning while others are mediocre or sadly deficient. The sadest are those having low admission standards, poor quality of in-

struction, and inadequate buildings, laboratory, equipment, and libraries. In making an inventory of the schools in a community, questions should be asked that will attempt to determine the extent to which schools are preparing children and youth to live effectively. Questions of the following type are pertinent:

Public elementary and secondary schools

- Are the school buildings in your community substantial, fire resistant, and modern?
- 2. Is the appearance of the classrooms forbidding or inviting?
- 3. Are classrooms overcrowded?
- 4. Are the teachers enthusiastic about instructing?
- 5. Are they paid a salary commensurate with what is expected of them?
- 6. Do the teachers cause the learning process to be interesting and challenging, or drudgery?
- 7. Are classes regimented or chaotic, or are they charged with educational activity which is directed skillfully rather than obviously?
- 8. To what extent do the teachers encourage students to try?
- 9. To what extent are students urged to go beyond their textbooks to seek information?
- 10. To what extent are the students taught to get along with people?
- 11. To what extent does the school develop in its students a sense of social responsibility?
- 12. To what extent is individual attention given to the able-bodied student?
- 13. What curriculum provisions are made for those children and youth who are suffering excessively from emotional instability, and for the physically handicapped?
- 14: To what extent are school buildings used for evening and Saturday adult education activities?

Colleges and universities

- Do the faculty members inspire their students to live constructively?
- 2. Do the faculty members teach their students to think deeply?
- 3. How selective and extensive are the library's holdings?
- 4. Are laboratories equipped with up-to-date apparatus?
- 5. Does it appear that at least half of the persons who have been graduated during the last ten years are using their education in performing tasks which have substantial value to society?

The need for taking an inventory is nearly always present in school systems and in independent educational institutions. By 1962, for example, the public elementary schools of the United States will face the situation of enrolling approximately six million more children than at present. This continuing upsurge in school population creates the specific need for an inventory. The influx, due to increased birth rate since 1945, will

demand more classrooms and a greater number of qualified teachers. Should not the local school districts, assisted by the state department of education in the respective states, now be studying the needs of their elementary schools? Some school districts, of course, have already begun the inventory.

CONSTRUCTIVE LIVING RATHER THAN NON-CONSTRUCTIVE

Life offers innumerable opportunities for constructive living. Can there be any question concerning the wisdom of living constructively? Each person has the choice of living constructively or non-constructively. This book emphasizes constructive living. In particular, Chapter 8, entitled "We Are Our Brother's Keeper", and Chapter 9, entitled "A Worka-Day World," urge living constructively.

A person who lives constructively has a concern for the welfare of others. He desires to perform a service or to help produce a product which he believes is useful to his fellows. One who lives constructively has a well-developed sense of social responsibility. He is a producer rather than a parasite, an obstructionist, or a demander. He sees what needs to be done that he himself can do and starts doing those things instead of spending his life tearing down the results of the work of other people. He helps rather than hinders.

Constructive living carries with it the satisfaction which results from doing things that are useful to society. One can live colorlessly, doing no harm, but no good. One can be aggressive, like the gangster, or negative, like the indifferent person, in living non-constructively.

There are so many jobs which yield an ample money income to sustain a family, but which do not deserve the serious attention of a person who desires to have a modest part in building a better world. Selecting a field of work that is socially useful is an important step in constructive living.

The person who has much ability but does little with it, perhaps driving a taxi when he could be a construction engineer, is not living very constructively because he is working far below his capacity. If he has much ability and the opportunity to use it, but does not use it, he fails to live constructively. On the other hand, it is possible for persons with little ability to live constructively. They can do so by sticking to simple but useful types of work, thus earning their way, rather than giving up and depending on a relative or friend, on a charitable organization, or on public assistance. For earning their way, in a useful field of work, persons with little ability deserve credit. They live constructively.

Persons who live constructively are more likely to be optimistic than cynical. They press on toward a worthy goal when other people claim that the goal cannot be reached and that conditions cannot be remedied. Even the sense of partial accomplishment is pleasurable for those persons who live constructively and press on toward a worthy goal.

The person who lives constructively looks for the good in people, and for the value to society in ideas which are brought to his attention. Those who do not live constructively are inclined to look suspiciously for weaknesses in people and to tell why a plan will not work instead of trying to determine how it can be made to function satisfactorily.

Schools everywhere ought to inspire people to live constructively. Unless schools thus inspire, there will be many who will respond to important matters by shrugging their shoulders. Many will criticize destructively or engage in activities which are equally, or still more, harmful to their fellow men. The function of schools is broad. In restudying educational systems with a view to improving them, we should keep clearly in mind that brilliance and a vast store of knowledge are usually of little real value unless accompanied by integrity, good judgment, and a desire to live constructively. The school program should not be confined to dissemination of encyclopedic facts and sponsoring of extracurricular activities of a nature that is primarily entertaining. Always it should be remembered that schools exert a tremendous influence and that, for better or worse, they mold to a large extent each generation.

PLATO RATHER THAN SPENCER

Education is as broad as all of life. The greatest philosophers, from early times to the present, have dealt with life in the over-all. The thinking of the greatest philosophers, therefore, has had an influence on trends in education, sometimes a powerful influence.

Perhaps a rather accurate picture of the sharp contrast in educational philosophy can be secured by comparing views held respectively by Plato of ancient Greece and by Herbert Spencer of nineteenth century England.

Plato was an idealist. In many of his writings he spoke about education, particularly in his two great works, the *Republic* and the *Laws*. Even when writing the *Laws* in his old age he maintained that education was "the first and fairest thing that the best of men can ever have." (Section 644). He emphasized that the primary function of the statesman is to improve the citizenry rather than to make laws.

For Plato, the education of one person was an evolution of that person's soul under the stimulus of environment. Education was a means of benefiting society. It was not an individualistic scheme. Plato thought in terms of society rather than the individual. In almost distinct contrast, Herbert Spencer was a rugged individualist, and one who viewed life so coldly as virtually to exclude the soul. From the time of his earliest writings, Spencer showed a strong inclination toward individualism. He looked upon education as being essentially a matter of concern for the individual. He believed that attempts by the state to direct education would inevitably cause harm. These viewpoints are brought out in his Social Statistics, published in 1851, and in his four essays on education, published in 1861.

Herbert Spencer, like some other philosophers of his time, looked upon the world as a machine that obeyed fixed and unchangeable laws, and, like some of his contemporaries, he rather much regarded man as being in that same category. Spencer attempted to interpret life, mind, and society in terms of three things—matter, motion, and force. He emphasized the doctrine of "survival of the fittest," and applied it to the fields of politics, ethics, history, economics, and to social development generally, as well as to science. Unfortunately Spencer's doctrine of "survival of the fittest" is a sort of dog eat dog philosophy, or "law of the jungle," and is all too common today. In its worst forms it is in somewhat the same category as the "eye for an eye" revenge in Old Testament times. Plato's philosophy of "the good life," was far different from Spencer's philosophy of individualism and doctrine of "survival of the fittest."

In defense of Spencer it can be pointed out that in places his writings on education have a wholesome ring. His influence on curriculums was

noted in Chapter 4 of this book.

It must be recognized that most persons who have had little schooling and little self-education, other than of a bread-and-butter kind, are unaware of Plato's philosophy of "the good life" and Herbert Spencer's philosophy of individualism, and his doctrine of "survival of the fittest." Nevertheless, they usually seem to reject ideas which are similar to Plato's advanced thinking and accept a point of view like Spencer's. Many persons with much schooling also have a philosophy like Spencer's.

Shall we be motivated by the golden rule or by the philosophy of an eye for an eye and dog eat dog? Both the Old Testament "eye for an eye" and an extreme version of Spencer's individualism and "survival of the

fittest" shrivel and die in the light of unselfishness.

It is a legitimate and a natural function of education to raise humanity above the dog-eat-dog concept. Schools should emphasize the principle that one must conduct himself in such a way as to avoid harm to others, and in addition, be a contributor, a plus influence in society. A philosophy of individualism, in itself, will not contain this emphasis. Plato's philosophy of "the good life" calls for courageous and ethical living. This courage and ethical living should be taught in schools—in kindergarten and on through professional schools and graduate school. This courage and ethical living should be taught in lieu of mere materialistic individualism.

During the school years, youth should be shown that fortitude is a necessary foundation for ethics. Great effort should be made to bring home skillfully to students the fact that honest living requires courage of the highest, and sometimes the most difficult, type. Students ought to be shown that in numerous instances courage and ethics are intertwined as tightly as two adjoining fibers in a piece of hard finished worsted cloth in a coat.

It is said with much fervor and some eloquence that the dog-eat-dog (survival of the fittest) philosophy must be taught to children as a matter of their defense. Yet, emphasis on such philosophy defeats the noblest purposes of education. We need to aim toward something better than the survival of the cleverist and the luckiest.

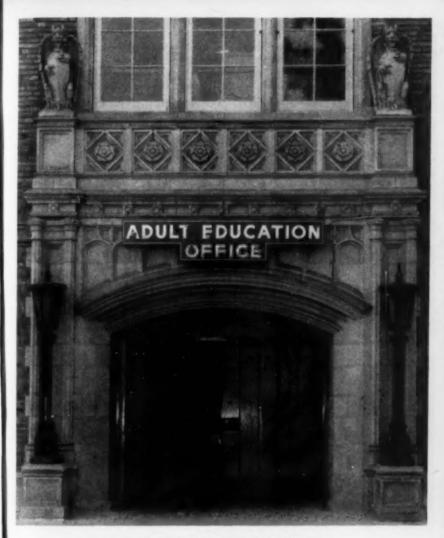
It is especially important to teach courage and ethics in elementary school and in junior high school while life patterns are forming in children. This is a job that parents should not neglect, and one in which the school should play a significant role. This early teaching of courage and ethics is a foundation on which to develop a many-sided sense of social responsibility within the individual. By skillfully giving the child instruction of this type while he is in elementary school, the formation of hard, selfish life patterns can be avoided. The child who is a bully in school is not likely to have a many-sided sense of social responsibility in his mature years. Teaching survival of the fittest has a tendency to bring out the worst rather than the best in us.

GLOBAL APPRECIATION

Achieving a permanent peace is largely a matter of sound education—for people in all countries. Such education can be based on nothing less than global appreciation.

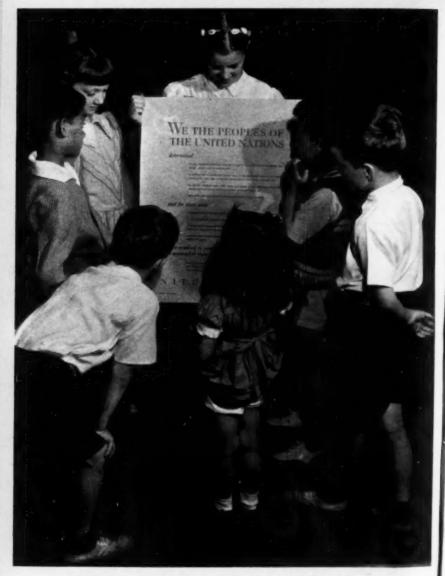
Being mildly aware of the problems of certain people does not necessarily generate appreciation for those people. International good will of vague sort does not produce global appreciation. When the people of one country actually understand the problems which confront the people in another, there is likely to be a two-way appreciation between the two countries, rather than contempt or suspicion. When a large percentage of the citizens of the United States become familiar with the history, traditions, and nature of Latin Americans, there is bound to be a noticeable appreciation in this country for natives of Central and South America. When appreciation of Latin Americans is widespread in the United States, then the citizens of Central and South American countries will be inclined to appreciate their northern neighbors. Life is like that. We become interested in those who are genuinely interested in us, and, conversely, we begin to draw away from those who shun us or treat us condescendingly.

In order to have a global appreciation which is worth anything, one must genuinely appreciate the worth in people of other lands and not look on them as "foreign" and "foreigners." Every large country has made contributions which benefit persons in all countries daily. A Japanese bacteriologist named Shibasaburo Kitasato (1856-1931) evolved a diphtheria antitoxin which has stemmed the ravages of a disease which formerly took many lives. Louis Pasteur (1822-1895), the French chemist who laid the foundations for the science of bacteriology, gave us the process of pasteurization. Madame Marie Sklodowska Curie (1867-1934), a native of Poland, is well known because of her discoveries in the use of radium. As mentioned in Chapter 4, John Gutenberg, a German, gave to the world the process of printing from movable type. Without such process, modern books, magazines, and newspapers would probably be non-existent. The



The Possibilities of Expanding Adult Education
Are Almost Unlimited

The evening school which is conducted in this high-school building at 4600 West Olympic Boulevard, Los Angeles, California, gives free instruction in a great variety of subjects. Here men and women enroll in special courses in English and speech, in business and economics, in history, civic affairs, and social sciences, in modern languages, in science and mathematics, in vocational fields, in fine arts, in music, in home decoration, and in health and physical education. This adult evening school is conducted by the Los Angeles City School System.



Schools Can Be a Mighty Force To Eradicate Hatred and Destruction

When schools in all lands teach children and youth to think broadly in terms of human welfare, the world will become a safe place in which to live. Human progress will then be virtually unlimited, Germans have made many scientific contributions which have resulted in the development of dyes, cameras, magnifying lenses, and the like. Nikola Tesla (1856-1943) was born in Serbia and was a pioneer in substituting alternating for direct current. This substitution introduced the widespread use of alternating current and made possible the great extension of

the use and transmission of electricity.

Instead of being suspicious of people in other countries it is well to appreciate their contributions. There is a great need in the United States, and probably in every large country, to teach global appreciation. We are all living on the globe, not away from it, nor in a hidden place on the globe. In a few minutes a message can be sent half way around the world. With jet propulsion, the earth can now be encircled at the equator in less than two days. Countries no longer can be isolated from each other. If citizens of a particular country are not taught global appreciation, they may receive little appreciation from the citizens of other countries and may obtain a badly warped impression of all persons from whom they are separated by several hundred or several thousand miles. The absence of appreciation for residents of other countries creates a situation in which the seeds of international discord can grow almost as rapidly as mushrooms on a hot, damp, summer night. Without global appreciation in a particular country, an incident can soon be fanned into a crackling fire.

There is urgent need for many activities which can develop international good will and friendly rivalry. The holding of the modern olympic games draws attention to persons who excel in swimming, in sprinting, in distance running, and the like, regardless of nationality, and, therefore, helps to build global appreciation. The awarding of Nobel prizes causes persons in all countries to respect the person who receives one, because it is awarded

on the basis of his or her achievement.

The holding of international expositions (world fairs) which are really international can serve as a medium for the exchange of ideas and can foster broad horizons. At such gatherings, exhibits can be entered from many nations. With present transportation facilities, it is not difficult for persons from many parts of the world to attend an international exposition. Prizes can be presented to winners without heed to the nation which each represents. Any activity which helps build solidarity of mutual respect between persons of different nations without creating antagonism toward any nation builds global appreciation.

Such units of the United Nations as UNESCO (Educational, Scientific, and Cultural Organization), FAO (Food and Agriculture Organization), and WHO (World Health Organization) have enormous potentialities for building global appreciation. Indeed, the building of global appreciation should be a major objective of these units. Article I of the constitution

of UNESCO states:

The purpose of the Organization is to contribute to peace and security by promoting collaboration among the nations through education, science, and culture in order to

further universal respect for justice, for the rule of law, and for the human rights and fundamental freedoms which are affirmed for the peoples of the world, without distinction of race, sex, language, or religion, by the Charter of the United Nations.

Groups such as the World Confederation of Organizations of the Teaching Profession, formed in Copenhagen, Denmark, in 1952, also have extensive opportunities to build global appreciation. The Confederation includes representatives from thirty-six countries and has potentiality of speeding international good will, promoting education, and raising the quality of teaching throughout most of the world.

Schools in all countries should emphasize the similarities among people rather than the differences, even though the differences may be more striking, such as color of skin (red, black, yellow, brown, and white), stature, and dress. Schools should emphasize that, basically, people everywhere have similar needs and similar innate characteristics. Until these principles are taught in all countries, a serious barrier will block the concept of one world, one people—the human race.

Exhibits can be used in classrooms and in school corridors to spell out the "one world" concept. Unesco is a source of assistance for a city superintendent of schools or for a state superintendent of public instruction who cares to develop such exhibits.

In order to develop global appreciation it is almost imperative that encyclopedias and textbooks which are written from a world viewpoint be available and studied in every country. The use of such materials will eliminate much prejudice which now undermines global appreciation. Textbooks currently used in the teaching of history all too often reflect the point of view of the nation by which they are used.

Temporary residence abroad usually is an effective means of developing global appreciation. The "exchange" of alert persons is doing much to narrow the chasms between nations. In dispelling ignorance, and the prejudice which is built on ignorance, there is nothing quite as good as firsthand information.

Since 1950 the United States, under the "Point Four" program, has been furnishing technical assistance in agriculture, industry, health, and other fields to under-developed areas in many parts of the world. This assistance is given in two ways, by sending technicians from the United States to Africa, Asia, Europe, and Latin America, and by receiving official representatives of governments and private individuals, in the under-developed areas and training those representatives and individuals for several months while they are in the United States.

Unesco makes information available about possibilities offered throughout the world to persons who desire to study abroad. This information can be found in its publication entitled Study Abroad: International Handbook: Fellowships, Scholarships, Educational Exchange, Volume, VI, 1953-1954. Unesco also distributes and administers fellowships. Some of these it grants; some are granted by governments of member states.

The programs for exchange of teachers and students between countries, carried on by the State Department of the United States and by the United States Office of Education, are highly commendable.

The practice of some universities to select outstanding persons from abroad to serve as visiting professor for a year is also commendable. Cambridge University, in England, for instance, has a visiting professorship of

American history.

Enabling students and teachers to spend approximately a year abroad has significant implications in the way of developing global appreciation. Why not enlarge the exchange programs so as to touch numerous parts of most countries of the world, and a considerable number of colleges, universities, and high schools in the United States? If exchange programs would be thus enlarged, more high-school teachers in the United States would find opportunity to teach for a year in England, or France, or Germany, or Chile, or perhaps even in India or Japan, while a teacher of the country with which the exchange is arranged would take the American teacher's place, here. When the two teachers are in an exchange status, and also after returning to their native lands, each would exert broadening influences. For example, while in exchange status an American highschool teacher would appear before parents, as well as before youth, to tell about American life. On return to this country the teacher would exert an influence on those enrolled in his or her classes and also on others through participation in the school's assembly programs, in its club-type extracurricular activities, and in school broadcasts.

In all of these exchanges, whether under the "Point Four" program of technical assistance, or under a United Nations' fellowship, or under some special arrangement for the exchange of teachers or students between two countries, an alert person selected for study or work abroad has the opportunity to learn at firsthand about people beyond the borders of his own country. Through that opportunity he can obtain global appreciation and pass it on to those with whom he comes in contact, both abroad and at

home.

Global appreciation sheds light. It decreases the possibility of devious persons to stir up conflict. Schools, as well as parents, should teach children and youth to appreciate the contributions which various countries have made to literature, art, philosophy, science, and commerce. Schools, and parents too, should also teach children and youth to try sincerely to understand the problems of people in other countries. When instruction of this type is carried on in all lands, it will be difficult for dictatorship and militarism to survive.

In the last half of the twentieth century, any system of education in the United States, or in other countries, which fails to emphasize global appreciation, and to emphasize it genuinely and wisely, will fail to ring true. To many persons it will sound as hollow and mocking as the reverberations resulting from striking vigorously the sides of an empty rain barrel with a

baseball bat on a hot, dry, August afternoon when crops are scorching in the sun.

SCHOOLS MUST SET THE PATTERN

Schools can set the necessary pattern for a better world. They can do so by providing good instruction in an atmosphere for vital learning and by providing a curriculum which meets the needs of all segments of the population. Schools which provide these essentials will make possible the attainment of the ten expectations upon which this book is based. Such schools will teach individuals to read, to think, to express themselves, to protect life and health, to have a many-sided sense of social responsibility, to have a balance between work and play, and to engage in constructive self-analysis. Such schools will set an excellent pattern. They will provide a good foundation for adult life and cause men and women to establish the habit of using what they know and of using it for purposes which create a desirable community. Schools must inspire. They must assist the individual in setting for himself a life-long pattern of a commendable type. This the schools can do by teaching children and youth to live constructively and to use their education and add to it throughout life.

In order for schools of the United States to do their part in setting the pattern for a better world, the curriculum of the American high school must in a broad way connect learning with the actual problems of life. Counseling must be furnished which helps each high-school student to select those parts of the curriculum which will benefit him or her. Then drop-out from high school is not likely to be the serious problem which it now is.

It is necessary to prepare some selected persons for positions of general leadership and other selected persons for highly technical assignments. But this is not enough. It is expecting too much of leaders and technicians that they provide a smooth functioning world. Schools must set a pattern which furnishes the rank and file of people with an education that makes them productive and which causes the individual to respect the rights of others and to try to determine through reasoning what constitutes fair play. When the masses of people in all countries receive education of this type, then the caliber of leadership which will be available will be able to avert severe clashes between nations and within the countries. Until then, to expect national leaders to avert world catastrophes is to expect the impossible.

In a totalitarian nation there is danger that children and youth will be indoctrinated with the views of the nation's dictator. In a democratic nation there is the danger that democracy may act as a leveling influence which produces mediocrity. In a democracy, schools which set a good pattern will nurture the democratic way without failing to develop its best potentialities. Schools which set a good pattern will increase the knowledge, and, in turn, raise the economic status of the less fortunate people.

In order for schools to set a good pattern and to leaven, it is necessary to have teachers who inspire. This fact was emphasized unequivocally by Charles G. Osgood, Holmes Professor of Belles-Lettres, Emeritus, at Princeton University, in an article entitled "Preserving Values." The article appeared in Phi Beta Kappa's *The Key Reporter*, Winter 1951-52. Osgood's article closes with the following sentence:

[learning] must be propagated as any great faith is propagated, from person to person, individual teacher to individual student, by doctrine and incarnate example and such courage and sacrifice as befit a minority until the world, becoming slowly aware of what it is losing and what it has lost, will turn to those who have guarded the treasure, and reclaim it.

In elementary school there is imperative need for teachers of the kind who watch over children in the class as though each is her own, and in high school and college there is an equally great need for teachers who look upon not one but all of their students as protégés. If eighty per cent of the teachers in the United States, or in any other country, meet these expectations, the percentage still is too small, for the teacher largely determines the pattern which the school will set.

A school having teachers with the following characteristics is bound to set an appropriate pattern:

Teachers who look on each person as an individual.

Teachers who cause their students to respect the dignity of man and to realize that simple human kindness is one of the greatest of all virtues.

Teachers who are buoyant, who radiate joyous living, and who pass on to students a zest to try.

Teachers who help each of their students as each needs help and who encourage the slow learner.

Teachers who provide group activity and stimulate group thinking in a precise but democratic way.

Teachers who recognize potential qualities of leadership and who find ways to develop it.

One who spends childhood and youth under teachers having the characteristics listed above is almost certain to emerge from school with a rather clearly defined set of high-type values. Possession of such a set of values indicate fairly strongly that the schools one has attended have set a good pattern. Such a set will protect the individual from floundering and will assure against making wrong decisions consistently.

Good schools set a good pattern. They build good nations. Nothing short of good schools which set an appropriate pattern of thought and conduct in all nations can build a decent world.

New Horizons

From the beginning of time mankind has been on the lookout for new horizons. They do not drift into view. They must be sought. The inherent desire for happiness, for fame, for wealth, for the opportunity to serve, or a combination of these desires has prompted men to sail the seven seas, to explore continents, to organize business ventures, and to delve into both pure and applied research. These activities have pushed back the frontiers of darkness. They have brought within sight many horizons of which mankind had been completely unaware. How many horizons still lie beyond our view is, of course, impossible for anyone to predict with accuracy.

In order to push on to new horizons there must be vision. There is a striking relationship between the progress of a nation and the vision of its leaders. Much of America's progress can be traced to its pioneering in education-public schools for all, higher education for nearly anyone who asks for it, and concentration on research, particularly in applied science, in our universities. In this pioneering the vision of Benjamin Franklin, Horace Mann, Charles W. Eliot, and others was significant.

The founding fathers of the United States had the vision to encourage education, for they saw new horizons. They could not, however, have known that the population of the new nation would increase to 167,000,000 people, and that the country would be filled with thousands of schools having a composite curriculum of staggering variety, and that these schools

would influence every American family.

The United States has already gone far in providing education. It must go farther in order to meet the needs of an ever more complex and interdependent world. Schooling needs to be provided which will inspire all Americans who are not mentally deficient to develop and use their abilities to the advantage of themselves and others and to the detriment of no one. To accomplish this objective, additional money for education will be necessary, but, still more important, thoughtful attention to education on the part of millions of men and women will also be necessary. We have inherited educational opportunities that were unknown to the founding fathers, such as four years of instruction in foreign diplomatic service or in chemical engineering. With vision it will be possible to improve America's schools to the point where they will enable the United States to make a substantial contribution to the improvement of the world.

The progress of mankind is dependent upon science (which is organized thought) and upon international co-operation. Each of the two can be promoted only through education. During the last century, science has developed to a much greater extent than has international co-operation. Geographical frontiers disappeared rapidly. Mountains and oceans no longer are barriers between nations. But fear is rampant. Tension has increased noticeably throughout much of the world. Education of a type which is based on noble objectives will reduce tension and will enable

science to continue to improve the lot of mankind. Through education alone a better world can be ushered in. Remarkable accomplishments are achieved by education which is planned co-operatively by men and women of large mind and from different walks of life, and which is conducted in a spirit of sincerity by teachers and school administrators who have a desire to educate and a capacity for educating.

Scarcely will education be effective unless we expect it to be effective and insist on its being so. In life generally, there is a rather close correlation between expectations and returns. Expectation of achieving a goal is a first step in its attainment. Therefore, if we expect much from the potentialities of education and from our investment of time and money in it,

the return is likely to be great.

It is necessary to strive continuously to improve the future. In order to improve the future, mankind must be improved. This can be done. History shows that mankind has advanced in many respects, from its primitive beginning, and that it has changed considerably in certain centuries. History also shows that some nations progress while others retrogress. The files of high schools and colleges in the United States are replete with the names of individuals who made significant improvement in their abilities in spite of physical or environmental handicaps. Through emphasis on a comprehensive and well-thought-out plan of education mankind in general can also be improved.

If the figures would be available it would be interesting to know how much of the world's income for calendar year 1955 was spent on education and how much of it was spent on defense—distrust of other nations—and aggression. How much effort is being devoted to education in each country? How effective are these efforts in the respective countries? These

questions deserve attention.

Unfortunately it is difficult to secure an accurate picture of schools in all countries. However, Table 172, entitled "Educational Institutions," pages 525-539, United Nations' Statistical Yearbook, 1954 gives data by countries, but there are many gaps in the table. The number of schools, by broad types, and number of teachers and students in each, are given.

The data are based on years ranging from 1947 through 1953.

To determine the effort expended in each country, for schools, and to make a reliable comparison of the extent and quality of schooling in the respective countries is virtually impossible at present because of variation in national income, cost of living, and cultural patterns. Table 165, "Budget Accounts and Public Debt," pages 446-490, United Nations' Statistical Yearbook, 1954, shows the relationship between amount of money spent on education, by various countries, to amounts spent on health, defense, etc. The amounts are expressed in the monetary unit of the respective countries. Per capita expenditure on education for different countries would not actually be comparable, even if the expenditures for all countries were stated in U. S. dollars, or in British pounds, and the

like. UNESCO'S Basic Facts and Figures, 1954; includes a table entitled "Public Expenditure on Education" (pages 40-45). The table shows total and per inhabitant expenditure for each of 161 countries and territories. Unfortunately capital expenditure is not reported for all 161 countries and territories. Expenditures are given only in national currencies, rather than in U. S. dollars. Furthermore, the table does not attempt to measure the effectiveness of public education in the 161 countries and territories.

The neglect or shackling of education in a populous country can endanger the entire world like a small, unattended, camp fire, and an unexpected wind on a dry day can bring a raging forest fire to a wide expanse of woodland. There are no signs which indicate that the shadow of dictatorship and its dangers will fade from the world scene during the next few years.

In every country it is apparent that additional attention should be given to education. In each there is need for sound thinking concerning curriculum and the selection and training of teachers. Especially is it important that students be taught in all schools to use what they learn and to use it for socially worth-while purposes, and to add to their education in a systematic way after leaving full-time school.

The vision which provides a will to educate others is just as essential as a will to be educated and to make use of education. Both furnish new horizons. When vision provides the will to educate, it is likely that appropriate planning and necessary financing will follow.

All of life's problems can be solved through appropriate education and its proper use. Any problem which is called to mind is caused by (1) lack of scientific data or failure to use them, (2) poor judgment, or (3) selfish ambition. The challenge of education in any generation is to meet reasonably well all three of these obstacles to a good life. With vision this challenge can be met successfully, regardless of how much the world will change. Vision, and the necessary action which goes with it, will cause new and better horizons to swing into full view.

The fall of Rome and the discovery of America, respectively, ushered in, gradually but certainly, new eras in world history. In the same way, World War II and scientific developments of mid-twentieth century have ushered in a new area. Consequently, many problems must be faced. Education of greater breadth and depth than ever before is needed, and it must be supplied to people throughout the world. In the United States and in some other countries, there is little hesitation to take bold strides in science. Nations dare not fear or neglect to take thoughtful and lengthened strides in education. New horizons depend on the improving and extending of educational systems in all parts of the world.

Academy in the United States, the, 88 Ackerly, William C., on reasons for dismissal from jobs, 271

Acts of Congress

amendments of 1950, 1952, and 1954 to Social Security Act of 1935, 275 George-Barden Acts, approved Au-

gust 1, 1946, 269

Mental Health Acts approved, 1946,

Morrill Acts of 1862 and 1890, 91 Public Law 815, approved September 23, 1950, 30

Smith-Hughes Acts, approved February 23, 1917, 269

Adler, Mortimer J., 208

Adult Education, 181-193

definition of, 186

division of, in Hawaii, 186 nature of offerings, 186

objectives of the adult evening schools of the District of Columbia, 181-182

offerings in Des Moines, Iowa, 182 offerings in Tulare, California, 182 offerings in Vallejo, California, 182 opportunities for pioneer work, 181 the potential demand for, 186, 187, 188, 192, 193

relatively new on an organized basis in United States, 183

study of in public schools, 188-191 study of 100 public evening schools, 191, 192

types of activities, 189, 190

Adult Education Association of the United States of America, 183, 184 Alberty, Harold, on secondary-school curriculum, 102

Alexander the Great, 70, 73

example from, on reasoning and applying ideas, 124, 125

Allen, Charles L., on the value of decision, 311

American Association for Adult Education, founding of, 183

American Association for the Advancement of Science, 57

American Association of School Administrators, 29, 100

on the gifted learner, 115

American Council on Education pamphlet, What the High School Ought To Teach, 109

publication by, 161, 178

American Magazine, 288

American Personnel and Guidance Association, Inc., 264

American School for the Deaf, 150, 151 American Technical Society, 104

Annals, The, 321

Aquinas, Thomas; on work, 260

Arbuthnot, May Hill, on books for children, 100

Aristotle, 70, 72

Army Medical Library, 234

Ascham, Roger, 79

Association for Supervision and Curriculum Development, description of a seventh-grade core, 113

Attitudes, importance of, 39, 40 Attributes of a good teacher, 49

Bacon, Francis, 79 quoted on subject of friendship, 295, 296

Bacon, Roger, 74

Battle for the mind, \$23-325 Beers, Clifford W., 237

Bell, Enid, 288

Benjamin, Franklin, curriculum news, 87, 88

Benjamin, Harold, 66 Bent, Rudyard K., 109 Biegeleisen, J. I., 288

Biennial Survey of Education, 22, 28 Bonaparte, Napoleon, control of education in France by, 65

Boredom, socially constructive work is defense against, 277

Bossing, Nelson L., on core curriculum, 111

Boston Latin School, 86

Bowen, Catherine Drinker, 207

Braille system of reading and writing, 155, 156

Brewer, John M., on reasons for dismissal from jobs, 271

Briggs, Thomas H., on the secondaryschool curriculum, 102, 103

Brother's Keeper, we are our, 243-257

Brougher, John F., 12 Brown, John, 249

Brownell, Samuel M., U. S. Commissioner of Education, on need for additional classrooms, 30

Browning, Robert, 214, 215

Buddha, recognized need for individuals to have concern for others, 245 Bulletin, Association of American Colleges, quoted, 166, 167 Butts, R. Freeman, 69 Byron, Lord, 220

Cain, Ethel, 287 California Reading Test, 129, 130 Carlyle, Thomas, on work, 260 Carrel, Alexis, 36

Charlemagne, schools established by, 72 Child-centered curriculum emphasis, 93, 94

not isolated from subject matter, 95 China, curriculum in ancient times, 69, 70

Christ, recognized need for individuals to have concern for others, 245

Christianity, 72, 73

personal sense of social responsibility, heart of, 244

Churchill, Winston, 220

Cicero, essay on friendship, 295

Classical curriculum, 68, 78, 79, 85, 103, 104

content at secondary level, 104

Classical curriculum in the American high schools, 90

Cleeton, Glen U, reasons for dismissal from jobs, 271

Clear thinking necessary, 212-214

Cleveland, Crover 18

College extension courses origin

College extension courses, origin of, 91 College, imperative need in, for teachers who look upon all their students as protégés, 335

Comenius, 82

Commendation, Fulton Oursler on, 306 Communicable disease, eight ways in which disease germs are transmitted, 231

Competing successfully with the years, 283-286

Compulsory schooling, problems of, 61 Consciseness, 214-216

Confusius, 69

recognized need for individuals to have concern for others, 245

Congressional Record, January 26, 1948, 34

Constructive attitude desirability of developing, 59 how to build, 122, 123

Constructive living, 18, 19, 20 a bulwark against mental illness, 238 rather than non-constructive, 327, 328 should be inspired by schools everywhere, 328

Constructive self-analysis, 299-317 Franklin's plan, 300-302

profit by analyzing evaluations made of you by others, 304, 305

suggested qualities to include in a self-rating chart, 302, 303

twelve questions of the type around which a yearly inventory of oneself can be conducted, 316, 317 value of a yearly inventory, 316

Continental Congress, 21, 22

Core curriculum, 110-114 definition of, 100

need for suitable reading material relating to social problems, 113 seventh-grade core described, 113

Cornell, Ezra, 181

Correspondence courses

means of continuing to learn after full-time school, 269

use of in adult education, 187 use of in East Hampton, Connecticut, High School, 107

useful for shut-in youth, 158

Counseling service, in junior and senior high schools, 29

Counseling solves many curriculum problems, 193, 194

Course system of instruction in college, 172, 173

Curie, Madame Marie Sklodowska, 330 Curriculum, 31

changes should be based on facts, 193 194

definition of, 54 dilemma, 58, 59

discussion of what it might consist, 120-127

for children with low intelligence for components, 134, 135

for fundamentals of, 59

for special groups, 59-64 for the brilliant student, 114-127

how to select brilliant high-school students, 118-120

need constant study, 64, 65

progress made by some public schools in selecting brilliant students, 115

Decision

Charles L. Allen on, 311

William James' five chief types of; summarized, \$12

William James quoted on deliberation and indecision, 312, 313 should not always be made quickly, 313

Value of, 311-314

Dewey, John, 18

his book, The School and Society, 94 Dictionary, how to use in building word power, 219, 220

Dictionary of Education, 186

Dictionary of Occupational Titles, content of, 265

Diehl, Harold S., 232

Diet, 232, 233

Dissatisfied College Graduates, 25 Division of Adult Education Service, NEA, 192

Dowling School for Crippled Children, program of, 158

Dunn, Lloyd M., 63

Education

needs additional attention in every country, 338

purposes of, in a democracy, 244 should help solve problems, 243

Education defined, 16-20

Education Directory, issues by U. S. Office of Education, 161, 162

Educational Policies Commission, 18,

on the gifted learner, 115

Egypt, curriculum in ancient palace schools, 69

Eisenhower, Dwight D., 58

Elementary education, subject matter integration through use of projects, 95, 96

Elementary school

especially important to teach courage and ethics in, 330

Elementary-school years, importance of,

Ely, Mary L., 184

Emerson, Ralph Waldo, 35 his book on friends, 294

Emotion, definition of, 136

Emotional instability, some causes of, 137, 138

Emotionally unstable

building of a feeling of security and a sense of social responsibility in, 144

education for, 136-148

fostering of a spirit of group loyalty and fair play among, 144-146

imperative need in, for teachers who watch over children in class as though each is her own, 335 program of physical health for, 143, 144

public, increase in enrollment by 1962, 326, 327

safety instruction for, 146, 147

Endocrinologist, his function in connection with curriculum for the emotionally unstable, 139, 140

Enthusiasm, no adequate substitute for, 306, 307

Epileptic student, the, 160

Erasmus, 75

Evaluating the printed word

four reasons why necessary to evaluate, 206

four ways to learn to evaluate, 206, 207

Experience-centered curriculum

for children of the fourth grade, 97, 98

in high schools, 107-109

Extension courses, means of continuing to learn after leaving full-time school, 269

Fansler, T., 188

Faulkner, Herbert W., 288

Faunce, Roland C., on core curriculum, 111

Federal Security Agency, 62, 111, 112, 188, 237

Financial cost of education, 21, 24

Find your niche, 269-271

Foreign languages, their value in the curriculum, 105

Forkner, Hamden L., 100

Fosdick, Harry Emerson, 34

Frank, Ruth, on classroom greenhouse, a project for third-grade children, 96

Franklin, Benjamin, 138, 274 autobiography, 208, 300-302 on humility, 273

plan of constructive self-analysis, 300-302

Frederick the Great and compulsory education, 85

Friends, wisdom of reserving for, 294-297

Friendship

Francis Bacon on, 295, 296

Cicero on, 295

Elbert Hubbard on, 295

requires time, 294

Fulbright, Senator J. William, 36

Gallaudet College, 150

Gantawa (Buddha), teachings of, 245

Gaumnitz, Walter H., 107 General education, 164, 165 concern about small amount of, in undergraduate schools, 162, 163 necessary in high school, 107 need for in high schools, 104, 105 General education vs. specialization, 56need be no quarrel between liberal arts colleges and professional schools, 177 Genesis, on Cain and Abel, 244 George Washington University Reading Clinic, 199 School of Medicine, 235 Germ consciousness, 231 Global appreciation, 330-334 encyclopedias and textbooks should have world viewpoint, 332 need for many activities which can develop good will, 331-333 Golden rule, the, 245 Good, Carter V., 161, 186 Gottshall, Franklin H., 288 Gray, J. Stanley, 272 Greece, curriculum in ancient times, 70 Grinker, Roy R., 256 Guidance, 18 Gundlach, Franz, 79 Gutenberg, John, 75, 330

Haggard, Howard W., 232 Hammond, Henry, 288 Handbook of Adult Education in the United States, 184 Harbin, E. O., 287 Harney, Martin P., 76 Harriman, Philip Lawrence, 235 Hartshorne, Hugh, 36 Harvard Classics, the; quoted, 300-302 Harvard Report, 28, 162 stating need for general education at secondary level, 104 Harvard University, 180 Havemann, Ernest, 24 Haverford College, 161 Health, observation as a factor in, 232-234 Heinroth, Johann Christian August, 234 Hellum, Amanda Watkins, 288 Hess, Walter E., 12 High-school curriculum has not kept abreast with the times, industrial arts should be available on exploratory basis, 106

High school, imperative need in, for teachers who look upon all their students as prodigies, 335 High-school years, an exploratory period, 105, 106 Higher education, 24-27 Hill, Arthur S., 63 on the retarded child, 133, 134 Hindman, Darwin A., 287 Hinsie, Leland E., 240 Hobby can be pursued for fun or skill or both, 292 can help one develop his personality, definitions of, 289, 290 selecting a, 290-292 Homework, 32 Horton, Mildred McAffee, on human relations, 272, 273 Houle, C. O., 188 Hubbard, Elbert, on friendship, 295 Human relations, importance of, 271-Humanism, 75 Humanities, the, 56, 57

Idealism, 37, 38 Illiteracy in eleven countries, 321 In-service training means of continuing to learn after leaving full-time school, 269 necessary for teachers, 23 Institute for Propaganda Analysis, 324 Instruction for physically handicapped children, three main ways to supply suitably, 150 Instruction for the shut-in, 158 International Declaration on Human Rights, 254 Interpersonal relations definition of, 305 guide for evaluating effectiveness of one's own interpersonal relations, 305 Inventory necessary from time to time, 325, 326 types of questions that are pertinent in making an inventory of col-

leges and universities, 326

types of questions that are pertinent in

making an inventry of public ele-

mentary and secondary schools,

"J. Q.," 43 Legasthenia, 129 James, William, 40, 208 Leisure his five chief types of decisions definition of, 280 summarized, 312 value of, 281 quoted on deliberation and indeciwise use of, 280-297 sion, 312, 313 Leisure-time activities Jamestown Virginia settlement, 260 books on, 287, 288 can be intellectually constructive, Jefferson, Thomas, 18 on money cost of education, 21 290-298 on self-mastery, 315 types of, 286-288 Lent, D. Geneva, 288 Jesus Leonard, J. Paul, on the secondaryadvice of, 254 concise reply, 214 school curriculum, 101, 102 Job simplification, 276, 277 Lewis, Norman, 198, 220 Liberal arts college six ways, 277 four ways it can help its graduates Job trends change in, after end of World War find satisfactory employment, even II. 261 though emphasizing general edueffect on, caused by women now cation, 176 handling a large variety of jobs, number of, in United States, 161, 162 Liberal arts curriculum, 160-177 effect on, by decline of employment five large subject matter areas, 169 in an industry, 262 integration of subject matter areas, effect on, by introduction of new pro-173-175 should emphasize world perspective, cesses, 261, 262 170 study of, 261-264 Jonson, Ben, 218 Liberal education Judgment, developing of, 42-45 advocated by Quintilian, 71 Junior colleges, 91 in ancient times, 163 Junior high school meaning of, 166 especially important to teach courage R. C. Simonini on, 166, 167 U. S. specialization at the college and ethics in, 330 origin and function, 103 level, important curriculum prob-Justice Oliver Wendell Holmes, on lem, 164 Library of Congress, Division of the reading improvement, 207 Blind, 153 Kalamazoo, case, re public support for Life high schools, 90 rich and full, 257 Keller, Helen, accomplishments of, 149 should be joyful, 282 Kempfer, Homer, 191 Life magazine, 28 quoted, 187 Lincoln, Abraham study of adult education activities by success after many defeats, 303 public schools, 188-191 Gettysburg Address, 215 Key Reporter, the, 335 Lincoln Lore, 303 Kindergarten Lists of great books, 208 can serve the physically handicapped. Literary, 197, 198 153-155, 158 Literature, its value in the curriculum, started by Froebel, 84 Kitasato, Shibasaburo, Japanese bac-Livingstone, R. W., 78 teriologist, 330 Lloyd, John, 12 Knowles, Malcolm S., 192 Locke, John, 79, 212 Kronenberg, Henry H., 109 on leisure, 281 Kronquist, Emil F., 288 Longfellow, Henry Wadsworth, on self-Laird, Donald A. respect, 41

Lowy, Louis, 187, 188

Loyola, Ignatius, 75

Lyceum, the, 182

on fear, 308

on self-mastery, 315

Learning, travel a means of, 293, 294

Mackie, Romaine P., 63, 152 Man or Mouse?, 303, 304 Mann, Horace, 82, 89 Marburg University, curriculum of, 79-Marshall, Peter, 34 Martens, Elise H., 62 63 Masefield, John, 281 Massachusetts Institute of Technology, Mathematics, its value in the curriculum, 105 Maugham, W. Somerset, 296 May, Mark A., 36 McDonald, Everett A., Jr., 107 McGrath, Earl James, 193 on adult education, 192, 193 on the physically handicapped, 148 McKim, Margaret G., 100 McKown, Harry C., 36 Menninger, William C., 235 Mental health, 234-240 Mental illness, 236-240 bulwarks against, 238, 239 Miller, Clyde R., 324 Mind, battle for, 323-325 Mittelman, Bela, 235 Montessori, Marie, nature of her schools, 84 Monthly Labor Review, on employ-

ment in anthracite industry, 262 Moors, influence of, on European education, 73, 74

Morality, teaching of, 34-37

deserve a special curriculum, 133 types and problems which, present, 132, 133

Mudd, Dorothy, on core curriculum in Maryland, 111

Mullinger, J. Bass, 72

Napoleon, Louis, control of education by, 65, 66

Nation, Carry, 249

National Association of Secondary-School Principals Bulletin, 49, 51, 103, 193 pamphlet series, Problems in American Life, 114

Planning for American Youth, An Educational Program for Youth of Secondary-School Age, 109

NBC broadcast, 236

National Committee for Mental Hygiene, 237

National Education Association; 13 department of Adult Education, 183 division of Adult Education Service,

Education for All American Youth,

interest in the brilliant student, 115 National Honor Society, 32

National Institute for Mental Health,

National Junior Honor Society, 32

National progress

undermined by a desire to do as little as posible and by demanding as much for it as one dares, 279

National Safety Council, 227, 229 Neumeyer, Esther S., quoted on leisure, 281, 282

Neumeyer, Martin H., quoted on leisure, 281, 282

Neurosis, definition of, 138 New horizons, 336-338

Northwest Ordinances, 21, 22, 27

Nursery schools, can serve the physically handicapped 153-155, 158

Occupational hazards, 228-230 four major groups of, 229

Occupational information, some publications giving, 263

Occupational Outlook Handbook, 263

Occupational Trends, 264 Ohio State University, 179 Reading Clinic, 129

Oliphant, J. Orin, on meaning of liberal education, 166

Osgood, Charles G., 335 Oursler, Fulton, on value of discreet

commending, 306 Overholser, Winifred, 240 Overstreet, H. A., 325

Parents, instructing function of, 33 Parochial elementary and high schools, curriculum of, 91 Pasteur, Louis, 330

Pennsylvania State University, 58

Personal sanitation, 230 Personnel and Guidance Journal, the,

Pestalozzi; contributions, particularly his Leonard and Gertrude, 82-84

Physically handicapped the curriculum for, 148-160

curriculum for should be very flexible, 148, 149

two qualities of special curriculum for, 152

Physiotherapists, their function in connection with curriculum for the physically handicapped, 156

Plato, 55

his Academy, 69, 70, 115 on education, 328, 329

Point Four program, 332, 333

Poor Richard's Almanac, on humility 273

Population, by continents, 321

President's Commission on Higher Education, 161, 170

on specialization vs. general education, 167

Pride of workmanship, 273 274 can be developed in others by supervisors, 274

Princeton Pniversity Press, 321

Problems

ahead, 319-322

three which must be faced, 322

Progress; depends upon worthy production, 278, 279

Progressive education, 100

Propaganda, 20, 323, 324

seven common devices of, described, 324

Proper setting for learning, 51, 52

Psychiatrist, his function in connection with curriculum for the emotionally unstable, 139-141

Psychologist, his function in connection with curriculum for the emotionally unstable, 139-140

Psychosomatic disorders, 234-236

Public health, largely dependent upon a sense of sanitation of individuals, 214, 242

Public health work; what it consists of, 240, 241

Public high schools, growth of, in America, 90, 91

Public library; means of continuing to learn after leaving full-time school, 268

Public speaking;

clear thinking necessary, 212-214 respect for the listener, 221, 222 use of visual media in, 220, 221 value of conciseness in, 214-216 value of well-chosen examples in, 216-218

word power, 218-220

Quadrivium, the, 164 Quintilian;

on summarizing literature orally and in writing, as a matter of intellectual discipline, 98, 99 Roman rhetorician, 71, 72

Rapid reading, instruction in, provided by U. S. Air Force, 200

Ratio Studiorum, 76, 77

Reading efficiency; four essentials of, 198

Reading habits

concentration, 203, 204

evaluating the printed word, 205-207 note taking, 204, 205

reading great books improves the mind, 207-209

rereading, 205

selectivity, 201-203

underlining, 204

Realism, 37, 38

Reeves, F. W., 188

Regents' Inquiry, 28, 188

Remedial reading, 198,201

Renaissance, effect of, on curriculum, 74 Respect for others, 250

Rex, Millicent Barton, 12

Richmond, Winifred V., 240

Riis, Jacob A, achievements of, 255

Robert, J. B., paper by, on the American high school, 90

Rombauer, Irma S., 215

Rome, curriculum in ancient times, 70-72

Roosevelt, Franklin D., 207

Roosevelt, Theodore, statements on social responsibility, 245, 246

Rousseau

Emile, 82, 83

Social Contract, 82

Ruskin, John, on meaning of education, 17, 18

Safety consciousness; 226-228

four ways in which it can be developed, 227, 228

Scholarship, reasonable standards of, 31-

Scholasticism, 72, 73

School garden as an educational activity, 95

School Life, 12, 63

on core curriculum, 112

School plant and equipment, need for expansion and improvement of, 29, 30

Schools must set the pattern, 534, 335

Science, its value in the curriculum, 105 Secondary schools

number youth enrolled, 101 two types in U. S., 103

Selecting a leisure time activity, guide for, 286

Self-analysis

Jeremy Taylor on, 299 Lucius Annaeus Seneca on, 299

Self-discipline, 250 teaching of 33, 34

Self-mastery

necessary, 315 Seneca on, 315

Thomas Jefferson on, 315

Self-respect

bolstered by performing socially constructive work, 278

fostering of during the school years, 40-42

in danger of losing it when depending on someone else to do your thinking for you, 323

increased by being sincere in friendship, 295

undermined by a desire to do as little work as possible and by demanding as much for it as one dares, 279

Seneca, Lucius Annaeus, 214 on self-analysis, 299 on self-mastery, 315

Seven Cardinal objectives, 13

Shakespeare, William, 218, 307Shaw, George Bernard, on independence, 247

Sheldon, Edward Austin, 84

Shores, J. Harlan, on core curriculum,

Shuttleworth, Frank K., 36 Siamese twins, 234

Simonini, R. C., Jr., on liberal education, 166, 167

Sincerity; no adequate substitute for, 306, 307

"Skipping" a grade, problems involved, 93

Slow learner

a triple problem, 128 assistance for, 128-136

should be provided with special curriculum only in case of low intelligence, 152

six common conditions for slow learning, 128

special exploratory period for, 180, 131

Smiles, Samuel, 41

Smith, B. Othaniel, on core curriculum,

Smith, Captain John, at Jamestown, 260

Social responsibility,

characteristics of a genuine, 250, 251 core curriculum should be developed sufficiently to produce this attitude, 113

developing it in the emotionally instable, 144

developing it in the emotionally unstable, through assignment of work, 147, 148

developing of, assisted by early teaching of courage and ethics, 330

developing sense of, in children of low intelligence, 135

how parents can develop it in their children, 254

importance of its being cultivated in the child, 92

lack of, creates problems, 247 must be inculcated, 248

requires opportunities, 249, 250 sense of, 243

study of biography can help one to acquire, 249

twelve specific examples of, 253, 255 Social studies, their value in the curriculum, 105

Social work; professionalization of, 247 Socially constructive work,

defense against boredom, 277 has great rewards, 277, 278 yields esteem of one's fellows, 278 Socrates, 70

Special curriculums for brilliant adults, 117

Special public day school for physically handicapped; reasons for 153, 154

Specialization vs general education, 167 Spencer, Herbert, 328, 329

his four essays on education, 85, 86 Spengler, Joseph J., on population and per capita income, 321

Stakman, E. C., 57

Stanley, William O., on core curriculum, 111

State University of Iowa; statement about its liberal arts curriculum, 163 Statistical Abstract of the United States on Federal grants for certain needy

persons, 275 on mental health, 237, 238 Stedman's Medical Dictionary, 234, 235
Stiegel, Henry William, 291
Stieri, Emanuele, 288
Stratemeyer, Florence B., 100
Sturm, Johannes, 68, 77, 88
Superintendent of Documents, 263
Survey of Current Business, 23
Susquehanna University Studies, 289
Swaroop, S., on rapid growth of the world's population, 320

Taylor, Jeremy; on self-analysis, 299
Teacher selection, 23
Teachers
in-service training for, 49

six desirable characteristics of, 335
Teachers College, Columbia University,

Teacher's salaries, 28, 29

Teaching the brilliant student how to budget time, 123, 124 how to examine written material for

internal consistency, 124 how to plan and direct the activity of

a group, 127 how to think in broad terms, 125-127 how to write a factual statement, 124

Teale, Edwin Way, 288 Teamwork

defined, 255

essential in modern society, 255, 256 Tear, corrosiveness of, 307, 308

Temple of Apollo; maxim on, 265 Temple University, 179

Ten qualities we should expect, 45 Terman, Lewis M., genetic studies by, cited, 115

Tesla, Nikola, 531

Tests, value of in selecting a field of work, 266

Thinking

definition of the process, 212 human progress based on, 310 power of, 310, 311

requires effort, 310
Thomas, Flavel S., on university degrees, 177, 178

Thompson, Warren S., on world population and food supply, 321, 322

Thoreau, Henry David, 208 on purposeful work, 259, 260 quoted, 274

Thorman, George, 235, 236

Thrift

habits of, appreciated by most employers, 276 should be advocated by teachers, 276 still important, 274-276

three trends contributing to the individual's lack of emphasis on, 274-275

Tiffin, Joseph, 272

Training, emphasis on, necessary during adult years, 267, 268

Travel

a means of adventure and learning, 293, 294

now relatively inexpensive, 293

Trivium, the, 163, 164 True greatness, 256, 257

Tutorial system of instruction on college, 172, 173

Types of mentally handicapped persons, 132

UNESCO

Basic Facts and Figures on public expenditure for education in 161 countries and territories, 338 fellowships, 332 purpose of, 331, 332

United Nations

Commission on Human Rights, 254

Demographic Yearbook, 321

publication on national and per

capita incomes, 24

Statistical Yearbook, 321
United Nations' Statistical Yearbook,
on schools in various countries,
337

U. S. Bureau of the Census, 42

United States Commissioner of Education, Annual Report 1950-1953, 30

U. S. Department of Agriculture extension service, 183 two publications of, 285

U. S. Department of Commerce, 25
U. S. Department of Health, Education, and Welfare, 22, 30, 63, 90, 188

U. S. Department of Labor, 228, 262 occupational information published by, 263

U. S. Department of State, programs for exchange of teachers and students between countries, 333

U. S. Employment Service, publication of, 265

U. S. Office of Education, 22, 28, 28, 30, 89, 101, 107, 111, 112, 187, 188, 192 interest in the brilliant student, 115 programs for exchange of teachers and students between countries, 553

publication on the retarded child, publications by, 97, 152, 161 source of information on providing educational opportunity for the physically handicapped, 153 U. S. Public Health Service, 231 University of Chicago its "College," 166 Round Table broadcast, September 29, 1946, 235; June 3, 1951, 236 University of Kansas Bulletin of Education, on core curriculum, 112, 113 University of Michigan, 178, 179 University of Minnesota Institute of Technology, Bulletin of, 178 University of Pittsburgh, 180

Van Doren, Mark, on adult education, 193 Vocational education not a dumping ground, 131, 132 offerings, 59 subjects helpful in high school, 107 training for the physically handicapped, 157, 158 wide variety of instruction can be provided for high-school youth and adults under Acts of Congress, 269 Voltaire, on work, 260 Vinal, William Gould, 288 Visual media; use of in speaking to groups, 220, 221

Washington Star, 233, 234 Weber, Harry Franklin, 12

Vital questions, 45

Well-chosen examples, value of using, 216, 217 Wells, Ted, 288 West, Patricia Salter, 24 Who should go to college? 26, 27 Williams, Henry Lionel, 288 Williams, Jesse Feiring, 232 Winnetka, Illinois, elementary and high school, 100 Wollstonecraft, Mary, 213 Woody, Thomas, 87 on liberal education, 164 Word power, 218-220 Work Captain John Smith, on, 260 Henry David Thoreau, on, 259, 260 Thomas Aquinas on, 260 Thomas Carlyle on, 260 Voltaire on, 260 Workmen's compensation laws benefits provided by, 275 comparatively ineffective until 1917, 275 World Confederation of Organizations of the Teaching Profession, 332 World Health Organizacion, a publication of, 320 Worry corrosiveness of, 309, 310 seven questions that can lead to a decrease of worry, 309, 310 Wren, Sir Christopher, on pride of workmanship, 273 Wright, Grace S., 107, 191 on core curriculum, 111, 112

Yale University, 180 Year Book of Education, 37

222-224

Writing, consideration for the reader,

REQUISITES FOR ECONOMIC LITERACY

GALEN JONES and BALDWIN LEE

TH a gross national product that attained the record-breaking annual rate of \$392 billion in the third quarter of 1955, the booming American economy has reached an amazing height and a bewildering complexity. American productive genius, operating in a climate of freedom and geared to unexcelled human and physical resources, has brought us to new levels of prosperity and plenty. But abundance, together with the vaulting standard of living it makes possible, is not to be enjoyed without cost or effort. A massive economy such as ours carries with it its own imperative demands—in information, understanding, responsibility, and intelligent action.

EDUCATIONAL DEMANDS OF THE ECONOMY

As a direct consequence of our extraordinary economic progress, the equipment in information and insights needed by the citizen to cope with the economic life around him has increased manyfold. Economics concerns us all. It plays a dominant role in our affairs, affecting our lives at every hour. Today prices, wages, interest rates, stocks and bonds, banks and credit, taxes and expenditure are complicated areas which properly concern the intelligent consumer. Few can escape for long the intricacies of installment credit, an income tax form, life insurance, or the Social Security regulations. Voters too are regularly called upon to cast a ballot on issues that are largely economic or that carry economic implications. Manifestly, a decent competence in economic education is indispensable to every alert and responsible citizen.

The purposes of economic education may properly be to provide the individual with such sound understandings as will predispose him to promote and defend that economy the benefits of which he shares, to vote intelligently on economic questions, and to use his knowledge for his own and for social good. From a purely selfish point of view, everyone should seek to qualify himself in economic knowledge and skills. On the other hand, society can ill afford to neglect the provision of effective economic education, which is as indispensable for safeguarding our economic and social system as it is for protecting our political and economic liberty.

Dr. Galen Jones is Director, and Dr. Baldwin Lee is Editor, of the Council for Advancement of Secondary Education, established jointly by the National Association of Secondary-School Principals and the National Better Business Bureau, Inc.

Education for economic literacy.—Adequately equipping youth to play their part intelligently and effectively in modern economic society, therefore, constitutes a formidable challenge today to American education. As our economy has grown phenomenally in size and complexity, the responsibilities and obligations of citizenship have vastly increased. No duty of the citizen is greater than his duty to know and understand, for only then does he have a basis for reasoned judgment, sound decision, and intelligent action. No less is it the duty of public education to make available to our young people such education for economic literacy as will build an informed, alert, and loyal citizenry.

WHAT IS ECONOMIC LITERACY?

In its Study on Economic Education, the Council for Advancement of Secondary Education has as its primary purpose the carrying out of a research program that will assist in providing for our young people a more adequate education for economic literacy. The Council has consistently used the term "economic literacy" to denote the possession of that basic equipment in economic understandings and skills needed by the citizen for intelligent and responsible participation in the everyday activities of a modern economy. The primary concern is with those fundamental economic facts, concepts, and relationships that every citizen should command. More explicitly, this essential equipment may be defined as follows:

 Understanding of the basic economic areas and topics needed for making reasoned judgments and sound decisions.

Ability to read with comprehension, as a result of familiarity with the economic terms commonly used in the press, the more thoughtful parts of the newspapers and magazines of the day.

3. Information and skill sufficient to perform efficiently and wisely such functions as making purchases in cash or on credit; maintaining a bank account; entering into loan, rental, insurance, hospitalization, or other contractual agreements; carrying out tax obligations of every kind; and voting intelligently on local, state, and national issues of economic import.

The problem.—The foregoing statement sets forth in general terms the requisites for economic literacy. It indicates the minimum standard to be met if the citizen is to function responsibly and effectively in the economy. At the same time it poses two questions, answers to which would make explicit the requirements of economic literacy, and provide concrete directives for its attainment: What are the basic economic areas and topics that every citizen should know? Which economic terms are commonly used in the press?

These questions probe for the *specifics* in the requisites for economic literacy. In an attempt to identify and evaluate these specifics, the two studies herein reported were undertaken by the Council for Advancement of Secondary Education with these respective aims in view:

- To derive a composite list of basic economic topics from the suggestions of selected representatives of the several major groups in our economic society, and to validate and evaluate this list of topics on the basis of ratings by judges representing the same groups.
- To analyze an extensive sampling of each of five types of publications—general magazines, general newspapers, farm journals, union journals, and company publications—in order to determine the character and frequency of the economic terms used therein.

I. A COMPOSITE LIST OF BASIC ECONOMIC TOPICS1

DERIVATION OF THE COMPOSITE LIST

The essentials for economic literacy.—Curriculum development has been proceeding apace in American schools for more than three decades. A changing social and economic order presents varying demands on the citizen, and creates new needs to be satisfied. Programs of study require continuing re-examination and revision to meet current conditions. Especially is this true in the area of economics, what with the amazing expansion and change that have characterized the American economy in the past generation, and that still go vigorously on. What are the basic essentials for economic literacy—what constitutes that vital nucleus of economic information indispensable for intelligent citizenship in a modern economy?

The letter of inquiry.—It was decided to put this question in a letter of inquiry to selected representatives of the various agricultural, business, educational, and labor groups that make up the backbone of American economic society. This procedure was deliberately chosen in preference to the checklist. In favor of the letter-of-inquiry method is the undoubted fact that it permits and even encourages the respondent to speak his mind freely, without let or hindrance, within the framework of the subject of inquiry. Further, it permits the respondent to express himself independently, without the undesirable features of the checklist procedure, the very form of which, with its leading questions and enumerated suggestions, restricts the responses to the predetermined substance and purport of the checklist. Finally, it encourages the very able respondent to reply creatively, often evoking a distinctive contribution.

In order that the request for basic economic topics might not seem to the respondents too formidable or forbidding a task, it was suggested that they each submit ten topics, together with such comments or explanations as they cared to add. It was foreseen that the separate lists of ten topics each would be so dispersed and varied in content that together they would cover the whole field of economics. Comments on or explanations of their

³A Composite List of Basic Economic Topics: Report on Its Derivation, Validation, and Evaluation, Council for Advancement of Secondary Education, Washington 6, D. C., 1985.

lists were solicited from the respondents lest because of lack of explicitness in their statements, or because of the deplorable ambiguity of economic terminology, some of the topics submitted might defy comprehen-

sion or interpretation.

Compiling the mailing list.—Our procedure in compiling a mailing list was entirely empirical. We assumed that people in the agriculture, business, economics, education, and labor groups would be interested and willing to co-operate in the project either because of their paramount part in the economy or because of their professional concern with economic education. Agriculture representatives were recommended by the major farm organizations² and the U. S. Department of Agriculture, Our mailing list of businessmen was compiled with the assistance of officers of the national business groups. In addition, various individual business leaders recommended the names of competent people. The names of the members of the labor group were obtained from a directory published by the Bureau of Labor Statistics, as well as in consultation with one of the assistant commissioners in the U. S. Department of Labor, and on the advice of the labor member of our Board of Trustees.

The list of economists was compiled with the assistance of the Farm Foundation, the Institute of Life Insurance, and the Joint Council on Economic Education. Additional names were obtained from certain individual professors, the U. S. Department of Labor, and the directory of the American Economic Association. The compilation of the list of educators was aided by the various national educational associations, the U. S. Office of Education (particularly the Division of Vocational Education),

and members of our own Board of Trustees.

Excellent co-operation in compiling lists of names of competent people was received also from the National Council of the Churches of Christ in the United States of America, the National Catholic Educational Association, and the National Congress of Parents and Teachers. Thus was drawn up a comprehensive and representative list of names—of people outstanding in their respective fields, and qualified and equipped to respond competently in our search for suggestions of basic economic topics. We made no attempt to ensure a random sampling of representatives, for the futility of such an effort was manifest from the beginning. We sought the names of those in each group who might be interested in our project and competent to assist in it. Using this mailing list as a basis, we sent out nearly 2,300 letters of inquiry during the winter and spring of 1955.

The percentage of responses.—A total of 35 per cent of the nearly 2,300 people solicited returned usable replies in time for inclusion in the analy-

*Chamber of Commerce of the United States, Institute of Life Insurance, National Association of Manufacturers, and National Better Business Bureau.

²American Farm Bureau Federation, American Institute of Co-operation, Farm Foundation, Farmers Union, and National Grange.

⁴American Association of School Administrators, Association for Supervision and Curriculum Development, National Association of Secondary-School Principals, National Council for the Social Studies, and United Business Education Association.

ses. In view of the nature and form of the survey, this measure of co-operation was heartening. Also, it must be pointed out that a large number of the individual replies actually represent the thinking of a group of people rather than that of the respondent alone; in other words, the 800-odd replies really reflect the views of more than 2,000 persons rather than those of some 800 only. Moreover, the request made in our letter of inquiry was not one that could be met offhand with a rule-of-thumb response. Ideally it involved a broad and thoughtful review of the whole economic scene, a determination of the highlights and essentials therein, and finally a selection of that handful of topics and concepts deemed to be of paramount significance for economic literacy. Indeed, it is probably no exaggeration to say that our letter of inquiry sought from each respondent what amounted to a creative act of selection after mature deliberation and careful appraisal.

Large numbers of respondents sent with their lists of topics letters expressing enthusiastic approval of the Council's program. They deplored the neglect of economic education in many schools, and our people's consequent lack of adequate understanding and appreciation of the economy in which they live. They characterized the need of education for economic literacy as obvious, urgent, and vital. Keenly aware that such education involved implicitly the essential question of what to teach, they strongly endorsed the project for determining the basic economic understandings

that all in our society should possess.

Coding the replies.-With the replies in hand, our next task was to collate and combine the more than 800 lists of basic economic topics submitted by our respondents. This unit of the project was done by a Special Committee of Six.5 Roughly speaking, the procedure was to code the items in each list according to a tentative outline, record the codings on the letter itself, and then post these on a Tally Sheet. After all the lists had been treated in this way, the tallies posted after each main category and topic on the Tally Sheet were totaled. Finally, from the master outline, which was full grown now as a result of numerous additions in the process of coding, and from the tabulations on the Tally Sheet, data were derived from which the Composite List steadily took form. A careful scrutiny of the resulting list led to the rearrangement of a few categories and topics to provide a more logical sequence. Some of the material was rephrased in the interests of clarity and simplicity. Certain illustrative and explanatory notes were added. Ten topics were eliminated because they had been suggested by very few respondents. Out of this process of reworking and refining at last emerged our Composite List of Basic Economic Topics,

⁵Dorothy Lampen, Associate Professor of Economics, Huntar College of the City of New York; Harry R. Bain, Teacher of Social Studies, Bethlehem Central Senior High School, Delmar, New York; Nelle E. Bowman, Director of Social Studies (retired), Tules Public Schools, Tules, Oklahoma; L. H. Fritzemeier, Dean, and Teacher of Economics, Oak Park and River Forest High School, Oak Park, Illinois; William C. Gescheider, Assistant to the Director, Council for Advancement of Secondary Education, Washington, D. C.; and Baldwin Lee, Editor, Council for Advancement of Secondary Education, Washington, D. C.

which embraces the views of some 2,000 competent people as to what the basic topics for economic education are, irrespective of educational level.

It is our belief that the Composite List thus derived presents a comprehensive enumeration, equitably representative of the viewpoints of the pertinent economic and professional groups, of the basic knowledge necessary for economic literacy. The number and qualifications of those whose suggestions form the list offer evidence of its soundness. The adequate representation of the major groups concerned goes far towards bolstering that evidence. The services of the able economists and experienced educators who interpreted and coded the suggestions, and thus derived the list, provide further assurance that the Composite List is a compilation of basic economic topics.

A COMPOSITE EVALUATED LIST OF BASIC ECONOMIC TOPICS

Derived from Suggestions Proffered by Selected Representatives of Various Economic Groups and Evaluated on the Basis of Ratings by Judges Representing the Same Groups

Enumerated examples are illustrative, not all-inclusive.

	, to	12300
	Orde	
1.	POPULATION AND NATURAL RESOURCES AS THEY AFFECT	
	OUR ECONOMY	13
	1. Size and growth of the population	57
	2. Composition of population: age, occupation, skills	77
	3. Optimum population: desirable balance between population and available	
	resources in relation to desired standard of living	86
	4. Population movements: immigration, migration, urbanization	75
	5. Economic geography: nature and location of natural resources; influence of	
	climate, topography	
	6. Conservation of natural resources	17
П.	CHARACTERISTICS OF OUR MODERN ECONOMY	1
	1. Foundations of capitalism: private property, freedom of choice, profit	
	motive, competition, etc	1
	2. Mixed nature of our economy: competition and monopoly; private	
	enterprise and governmental activities-freedom vs. control	3
	3. The American standard of living: distribution of income	
	4. Influence of political forces on our economy: pressure groups	44
	5. Influence of social forces on our economy: foundational importance	
	of education	23

The main categories (indicated by Roman numbers) and the seconomic topics (indicated by Arabic numbers) are separately ranked. Equivalent rank orders indicate that the topics concerned are of equal rank.

		Or	der*
	6.	Economic growth and progress: evolution of the American economy from colonial times—rising standard of living, dynamic nature of our economy	
	7.	Importance of ethical values in economic society	
ш	. T	THE PRODUCTION AND MARKETING OF GOODS AND SERVICES	. 4
		Production—a source of wealth and the means of satisfying human wants; consumption—the motive for production	. 8
	2.	The nature and role of the factors of production: natural resources, labor, capital, management.	. 4
	3.	Formation of capital: the importance of savings and investment	
		Problem of scarce resources and unlimited wants: the need for finding the best balance in the utilization of the factors of production;	
		diminishing returns and efficient production	. 44
		Costs of production: fixed and variable	. 73
	6.	The dynamic nature of technology (productivity): industrial revolution,	
		science, research, automation	. 13
	7.	Specialization and the resulting interdependence of people: regional and	
	_	occupational division of labor; transportation and communication	. 33
	8.	Middlemen-functions and costs: wholesalers, jobbers, retailers,	. 67
		advertising agencies	. 07
IV	. T	HE PRICE SYSTEM	. 3
	1.	How commodity prices are determined in a free economy: law of supply	
		and demand	. 5
	2.	How the prices of the factors of production are determined in a free	
		economy: rent, interest, wages, profits	. 12
	3.	What prices do in a free economy: allocation of resources, adjustment	
		of demand and supply to each other	. 18
		Group restraints on competitive price: monopoly prices, managed prices, imperfect competition	. 29
	5.	Governmental restraints on competition: fair trade laws; patents; price, wage	
		and rent controls	. 23
V.	N	ATURE AND PROBLEMS OF BUSINESS ENTERPRISE	11
	1.	Forms of private business ownership: single proprietorship, partnership, corporation, co-operatives	53
	2.	Business finance: stocks and bonds, financial statements, investment	-
*	-	banks, security markets	. 66
	3.	Corporate ownership and control: diffusion and concentration	. 73
		Big business and small business: advantages and disadvantages of each	
	5.	Business combinations: mergers, holding companies, cartels	. 82
	6.	Public utilities (privately owned)	. 82
		Profits and losses in business: insurable and uninsurable risks; causes,	
		results, and extent of business failures	
		Size and rate of corporate profits	. 78
	9.	Government regulation of business: antitrust policy, security and	
		exchange regulations, food and drug acts	. 47

	Ran	-
	* Order	
10.	Government aids to business: subsidies, loans, tariffs, information and advice.	51
11.	Government ownership: TVA, postal system	54
12.	The extent, areas, and ways in which government regulates or operates	
*	business enterprises	95
VI. I	NDUSTRIAL RELATIONS	5
1.	Development of labor organizations	51
2.	Collective bargaining	31
3.	Unemployment (including technological unemployment): individual	
	and social implications	26
4.	Modern technology and the psychic needs of the worker: sense of belonging,	
	sense of security, feeling of group acceptance, pride in work	14
5.	Labor-management practices and their effect on productivity: incentives	
	and restrictive practices	26
6.	Labor legislation: social security, workmen's compensation, unemployment	
	insurance, child labor laws, minimum wage laws, Wagner Act,	~
_	Taft-Hartley Act, etc.	
7.	Responsibilities of labor and management to each other and to the public	0
	Agriculture	9
1.	Changing situation of agriculture in our economy: declining percentage of	
	farmers in the total population, mechanization and increased capital	
	requirements, size of farms, scientific farming	
	Current problems of the farmer: surpluses, prices	36
3.	The farmer's efforts to help himself: co-operatives, farm organizations,	
	improved methods and management	8
4.	The government's efforts to help the farmer: price support program, farm	
	credit agencies, experimental stations, agricultural education	12
	Money, Credit, and Banking	
	History (origin) of money	
	Kinds and functions of money	
	Monetary standards	
4.	Credit: kinds, volume	37
5.	Kinds and functions of banks (including Federal Reserve System): how	
	banks increase or decrease the supply of money and credit	25
6.	Other credit institutions: Federal Home Loan banks, Commodity Credit	
_	Corporation, consumer credit agencies	
7.	Federal and state regulation of banking	9
		7
1.	Gross national product and national income as indicators of the level of	
	economic well-being	4
2.	Changing price levels or the unstable value of money: inflation and deflation,	
	money income and real income	
	Business cycles: their characteristics and causes 4	0
4.	Relation of money and credit to the level of economic activity and prices:	
	equation of exchange	6

Rank Order* 5. Maintaining balanced relationship among production, employment, income, spending, savings, and investment in order to achieve a high level of national 6. Government monetary and fiscal policies as they affect economic stability 15 1. Principles of taxation and kinds of taxes; amount of governmental 3. Government spending programs and services: war and defense spending, 4. Balanced budgets (desirable or undesirable?); size of the national debt 1. Economic interdependence of peoples: importance of international trade 7 4. Attempts to expand world trade and foreign investment: reciprocal trade agreements, simplification of tariff regulations, Export-Import Bank ... 70 XII. CONTRASTING ECONOMIC SYSTEMS..... 1. Capitalism-and Socialism, Fascism, Communism, others; comparison of the American standard of living with those of other countries...... 2 5. Consumer credit: proper use, kinds (including installment), sources; 11. Vocational information: choosing a vocation, getting and holding a job, XIV. ECONOMICS AS A WAY OF THINKING AND REASONING............ 14 2. Understanding of commonly used statistical materials: index numbers..... 58

VALIDATION AND EVALUATION OF THE COMPOSITE LIST

Validation.—In view of the systematic and precise method employed in deriving the Composite List, its validity would appear to be unchallengeable. But what does "validity" connote within our present frame of reference? It may be stated that the question of validity implies the inquiry as to whether the list of basic economic topics is indeed what it purports to be. That is to say, Are the economic topics basic (and therefore essential) for economic literacy? Though a validation of the list at first seemed superfluous, subsequently it was deemed desirable to adopt a validation procedure as an independent check of the economic topics compiled. This step was finally decided upon when it became apparent that by one and the same procedure both a validation and an evaluation of the economic topics could be achieved.

Evaluation.—The Composite List consists of 88 economic topics grouped under 14 main categories. Comprehensive in scope, it probably comprises most of the fundamental economic areas as well as a majority of the principal topics thereunder. Owing to its inclusive character, the list is the key to a formidable array of subject matter. Various factors such as limitations of time or interest, however, might operate to make a discriminating selection of topics from the list the only feasible goal for many learners. An evaluation of its 102 items seemed imperative, therefore, in order that the relative importance of the items for economic literacy might be differentiated. In this way, topics determined to be of highest importance in the list might be distinguished and chosen for initial attention, or

to form a curtailed program of study.

Selecting the judges.-In the selection of judges to validate and evaluate the Composite List, the main criterion was competence in economics. Though circumstances made it impracticable in many cases to insist upon this qualification as an indispensable condition, it was nevertheless adhered to whenever possible. Certainly the necessity for sound economic understandings was implicit in the job to be done by the judges. This requirement was explicitly stated and specifically emphasized in the process of compiling the mailing list, which was assisted by the same individuals and organizations that recommended the names of people who helped to build the Composite List. Our six groups of judges, representative of the pertinent economic and professional segments of the economy, consist of 135 agriculture, 171 business, and 89 labor leaders, 107 economists, 317 educators, and 226 high-school teachers of economics. These 1,045 judges who made usable responses are evenly distributed throughout the 48 states and the several territories, while a few reside in Canada. They constitute 65 per cent of the 1,605 people to whom evaluation forms were sent.

The number of judges.—It is recognized that samples of a population under study, however large they may be, often yield misleading results. Needless to say, the decisive factor is not the size of the sampling, but

the method of selection. Inasmuch as the object was to secure the individual and collective judgments of the six economic and professional groups as to the validity and importance of our list of topics, every means within our command was used to the end that a cross section of the membership competent in economics of each group might be obtained. We are confident that our panel of judges does constitute such a selection as to ensure reliable ratings. It perhaps will bear repeating here that our constant endeavor was to select from each group those representatives who were competent to judge the validity and importance of a list of economic topics. The key criterion in the selection of judges was competence in economics.

-

1

i

8

h

n

it.

10

8.

n

1-

ic

is

e

n-

10

a-

se

ut

ey

re

m

ts.

ut

The rating scale.—The Composite List consists of 88 economic topics subsumed under 14 main categories. It was our purpose to obtain from the judges individual ratings of the 102 items on the list. To this end, an Evaluation Form was designed, with a five-point numerical scale arranged to the right of each item.

0	1	2	3	4
1			1	
Unim-	Somewhat		Very	Essential and
bortant	Important	Important	Important	Indispensable

The question put to the judges was this: How important is each item in the list for economic literacy? In other words, is each main category or economic topic listed of sufficient importance to warrant or require its inclusion in the basic equipment of the responsible and intelligent citizen in our economy? Put negatively, the question might take this form: Ignorance of which areas or topics would be serious enough to stigmatize one as being economically illiterate? It will be remembered that the Composite List is a compilation of the responses of leaders in the major segments of the economy to this question: Which ten concepts or topics do you consider to be basic or indispensable for economic literacy? By definition and derivation, then, all of the items in the Composite List are deemed by at least some competent people to be basic and indispensable for economic literacy. The present problem was to determine the relative importance of the items from that standpoint.

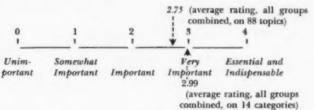
The judges were asked to circle the numeral on the scale opposite each item which indicated their judgment. They were warned against giving fractional ratings. Since the main categories and the topics are not comparable as each category comprehends in content the topics listed under it, we requested that the 14 main categories be rated as a group after the individual topics had been rated.

Evaluation and validation.—The combined ratings of the judges with respect to the individual items would differentiate these items one from the other on the basis of our criterion—their relative importance for economic literacy. This constituted our evaluation procedure. At the same time, and by the same ratings, we felt justified in inferring that items rated high on

our scale of "importance for economic literacy" would be confirmed as having a valid place in a list of basic economic topics, while items rated as "unimportant" would be invalid on such a list. Thus by interpreting "important for economic literacy" to be synonymous with "basic," we were able by an identical rating procedure to achieve a validation of our economic items as well as an evaluation of them. A statistical validation of the list was not attempted because the method by which it was derived seemed to make such rigorous measures unnecessary.

Relative importance of the items.-By virtue of its method of derivation, all of the items in the Composite List may be presumed to be "important." Indeed, many of our judges informed us of their inclination to rate every item "4" (essential and indispensable). Yet theoretically there are infinite degrees of "importance." In a given situation, it may be difficult for the human mind to distinguish many of these varying degrees, but the possibility is there. To ensure a practical differentiation of our economic items, we felt obliged to include the following note in the instructions accompanying the Evaluation Form: "We recognize that most of the items in this list of basic economic topics may seem to you important for economic literacy. In view of this, it is hoped that you will exercise careful discrimination in rating them, to the end that items of varying degrees of importance may be differentiated." The rating job put before the judges called for fine distinctions based on sound knowledge of the subject and close acquaintance with the everyday needs of the individual in a complex economy. The large proportion of returns received is a creditable commentary on both their high sense of responsibility and the merit of our, project.

The Composite List validated.—The average rating given the 14 main categories combined by the six groups of judges collectively is 2.99. This represents the judgment that the 14 categories are "very important" for economic literacy. Similarly, the 88 economic topics receive an overall average rating of 2.75, which is a quarter step below point "3" (very important).



The somewhat higher rating on the categories as compared with the topics was not unexpected. The categories, being broad areas which with one or two exceptions form the traditional subject matter of general economics, would naturally win readier and more emphatic approval than

the narrower and, in some cases, less widely recognized topics. Be that as it may, the high overall average ratings by the 1,045 judges place the Composite List as a whole within the limits of the "very important." This may be interpreted as confirmation of the validity of the list.

In the ranking of the 88 economic topics on the basis of the overall average ratings by the judges, even the topic occupying the bottom position (88th) has a rating of 1.72, which is only about a quarter step below the point signifying "important" on the scale. The unequivocal implication of this is that the judges affirm the importance of the Composite List in toto, and reject not a single item as being "unimportant" or invalid. The decisive conclusion of our validation procedure is, therefore—result, positive.

The Composite List evaluated.—The rank order of each of the 88 economic topics, and of each of the main categories, is given in the Composite List of Basic Economic Topics appearing on page 354. The ranking of the economic topics is on the basis of the overall average ratings by the six groups of judges totaling 1,045 in number. That of the main categories

is on the basis of the ratings by 825 judges.

The Composite List, representing as it does the essence of the thought and suggestions of some 2,000 leaders in our economic society, embraces a unique compilation of material. With the added evaluation of the main categories and topics in it, the list should prove even more meaningful and useful. For here may be found in brief compass those economic areas and concepts judged by a large number of competent people to be essential for economic education. In addition, the list being fairly long, the rank order enumeration of the topics provides not only a most significant differentiation of the 88 topics, but also makes possible ready and convenient

selection from them for various purposes and uses.

al

an

The rank orders of the various topics no doubt will offer to those interested hours of illuminating and rewarding study. The ranking on the basis of relative importance of material already assumed by derivation to be supremely important cannot but be both stimulating and provocative. Of course, no thoughtful and informed person will agree with all of the ratings. But who will not be challenged by the fact that the two top positions in the evaluated list are occupied by "Foundations of Capitalism" and "Capitalism—and Socialism, Facism, Communism, others"? Extraordinary in view of the total impact produced is that third place is held by "Mixed nature of our economy: competition and monopoly." This striking preoccupation exhibited in the top three items with the nature of our economy in contrast with other economies is doubtless induced only in part by the Communist challenge. At the same time it also is a manifestation of that latitude in a free society which permits gropings and searchings for an even better way of life.

Other evaluation data.—In our complete report, a number of tables presenting other results of the evaluation of the Composite List are to be

found. Limitations of space prohibit the inclusion of such tables in this summary. For example, the rank order placement of the 88 topics by each of the six groups of judges would repay careful study. The many areas of agreement, and the items where contrasting points of view are revealed or different emphases are shown, offer opportunities for interesting and fruitful comparisons. Another table in the complete report presents, by percentage of the entire panel of judges, the ratings for the 102 items in the Composite List at each point in the five-point scale. Since it was a basic list of economic topics that the judges were evaluating, quite naturally most of their ratings were skewed toward the upper end of the scale, and very few rated any item "0" (unimportant). Nevertheless, the analytic data contained in this table with regard to the evaluation of each topic are extremely significant in interpreting its position in the Composite List. Many other nuggets of information are available in the evaluation tables. We have perforce had to content ourselves in this abridged account with supplying only a few samples of the rich deposits that await anyone who digs into the various tabulations of data presented in our full report.

II. ECONOMICS IN THE PRESS®

THE DEMANDS OF THE PRINTING-PRESS AGE

The printing press has revolutionized civilized life. Toilsome manuscription early gave way to the mechanical duplication of copy, and the town crier has long since been supplanted by the cyclopedic daily newspaper. Indispensable servant of man, the printing press has ably assisted his progressive advancement by brain rather than by brawn. By its twin functions of preservation and dissemination, it gives back true images of an epoch, a society, an event, or an idea. Besides myriads of other things, it has recorded the substitution of horsepower in machinery for manpower as an end result of the Industrial Revolution. It pictures the mighty capacity of modern mass production methods to produce more and better goods at lower prices, and thus to make possible an ever improving standard of living. It depicts the separate roles of science, research, and intelligent labor and management know-how in the spectacular advance of American industry. The printing press literally captures and preserves the story of the march of progress.

But to what end these prodigious contributions of the printing press? Not, to be sure, merely that words or even ideas may be preserved and passed on to posterity. Unless what is recorded on the printed page is read and understood and utilized to eventual profit, the tireless presses have turned in vain. The printing-press age demands universal and extended education; it is an age requiring higher and higher levels of literacy as a preparation for responsible citizenship.

^{*}Economics in the Press: Composite Report on a Survey of Magazines and Newspapers for Economic Terms, Council for Advancement of Secondary Education, Washington 6, D. C., 1956.

In this country, with newspapers bought by the tens of millions of copies daily, and with many thousand different magazines published periodically, heights of mass publication and circulation have been reached. The significance for education of the universality of this one medium (printing) of mass communication is incalculable. It is perhaps platitudinous (though in view of present controversy, necessary) to point out that reading is a mental rather than a physical process. Reading is not reading unless there is comprehension. Undeniably too much reading today is accompanied by too little efficient assimilation of what is read, and too little critical evaluation for translation into action.

Economic understandings and the reader's needs.-The size and complexity of our economic system impose heavy burdens upon each citizen. Economics is not simple. Our economy and its manifold problems are not easy to understand. Even many seemingly elementary materials bearing on economic questions are not such that he who runs may read intelligently. Nevertheless, responsible citizenship demands an economically literate citizenry. What, then, are the understandings requisite for economy literacy? To get closer to our immediate problem, which economic terms must the reader understand in order to read newspapers and periodicals intelligently?

Language and the economy.-Through language, individuals acquire ways of thinking. Thus group consciousness and co-operation are developed. Whenever people are organized into groups for purposes of specific action, they tend to develop a specific language. In the presence of the increasing complexity of civilized life, the demand for clear communication becomes greater and greater, and the need for mastery of special language forms-technical terms-grows. In modern society language is intimately woven into every form of group behavior. Our economy as well as our society can function well only by virtue of the linguistic communication that links its members. No community can be organized to make full and proper or effective use of its economic resources except on the basis of economic literacy.

Formerly, with the predominance of spoken communication and with everyday life requiring little reading or writing, it was possible for many to dispense with language literacy and conceal their disability. But when the experience of society widened, new forms of language were needed. In the complex societies of our contemporary civilization, language learning is necessarily a lifelong process. Functional literacy (ability to read and write at fourth-grade level) is no longer adequate to cope with the demands of our economy. The special language of our economic society must be mastered; this is the essential requisite of the responsible citizen's

intelligent participation in it.

A note on semantics. - The ordinary man today has throughout his life been subjected to some sort of economic education-sporadic and imperfect, no doubt, but casually continuing. In the process he has acquired a smattering of economic terminology. Though perhaps innocent of any knowledge of the word, he is sensitive of the incidence of certain taxes imposed upon him. Quite unaware of the economics of insurance, he may mistakenly feel that he knows insurance because he buys it. Corporation stock he will not touch, for in his opinion investing in shares may be "nothing but gambling." It must be conceded that such vague understandings are quite inadequate as bases for sound judgment or action. Each term (e.g. wage) has one or more denotations (the things, relations, or properties to which it refers), together with various connotations (e.g. employment, purchasing power, fringe benefits, collective bargaining) and special associations. At the same time it often is the focal point of a family of concepts (e.g. minimum wage, money wage, real wage, incentive wage system, wage control, wage scale, wage-price spiral, wage leadership, wage earner) which must be understood if the implications of the term are to be fairly grasped. A term is a complex whole, the sum total of the qualities which the term basically means and also implies, or of the objects to which it may be applied. An economic term, or any term, is merely a conventional symbol used to refer to the thing or happening for which it stands. Understanding economic terms, then, is not simply a matter of learning words; it is a matter of correctly relating the economic terms to the economic phenomena for which they stand and perceiving their direction for action.

Economic terms in newspapers and magazines.—The economic terminology that has evolved with the growth of our economy bulks large in number and variety. Mastery of the entirety of this special nomenclature is a goal more appropriate for the economist than for the layman. But since economic terms occur with considerable frequency in newspapers and magazines, is it not reasonable to expect that the reader should be educated to understand what he reads in these organs? What verbal equipment does economic literacy demand? More specifically, what basic economic vocabulary must the general reader possess adequately to comprehend newspaper and magazine articles? To find a definite answer to this question, it was decided to make a content analysis of an extensive sampling of newspapers and magazines for economic terms. This procedure ought to reveal what economic knowledge is essential for current newspaper and magazine reading, and it has the indispensable virtue of being objective.

A SURVEY OF NEWSPAPERS AND MAGAZINES FOR ECONOMIC TERMS

The technique of content analysis has come into prominence in recent years in the study especially of attitudes, prejudices, and predispositions. Word counts have become standard procedure in building word lists of one kind or another. Such a technique may be expected to yield results both valid and reliable, provided that a reasonably adequate sampling of material is analyzed, and the object of analysis (economic terms, in our case) is sufficiently defined to make possible an objective analysis.

The material selected for analysis.—In order that a comprehensive survey might be made of the general reading material (excluding books) in the American home, the study was divided into five units to comprehend five types of publications: (1) general magazines, (2) general newspapers, (3) farm journals, (4) union journals, and (5) company publications. General magazines and newspapers constitute the bulk of popular reading in this country. In the cases of two large groups of our population, the farmers and the union workers, farm and union journals respectively are probably as widely read as general magazines and newspapers. Company publications, representing another substantial segment of the nation, the business group, have an extensive circulation among employees and investors. The five groups of publications chosen include the major categories of the daily and periodical press, and comprise a representative coverage of the field.

General magazines⁷.—Our unique combination of technical superiority and a high level of literacy is superbly exemplified by our general magazines and their millions of readers. In format, typography, color printing, and pictorial illustration our magazines are incomparable. The tremendous circulation of our weeklies and monthlies, coupled with the voluminous advertising that they carry, makes possible their beneficent trinity of quality, quantity, and price. A score of our magazines command the attention of multi-millions of readers for each issue. Unquestionably, our leading popular magazines wield an enormous influence and form a vehicle

of public opinion that must be conjured with.

Most of the general magazines chosen for analysis are representative of the different well-recognized types. They are so well known, and have been a part of the American scene for so long, that we do not feel called upon either to describe them or to justify their selection. The several widely circulated women's, family, and home periodicals were excluded from consideration after a trial analysis of a few issues of each yielded only a scant number of economic terms. Senior Scholastic was used because it is a publication particularly addressed to the high-school student, in whom we have a special interest in view of our concern with secondary education. An analysis of a sampling of Printers' Ink was made so that the data gained therein might be used as a check against the other findings. Printers' Ink is not a general magazine, but one devoted to the fields of advertising, selling, and management. Would its special character produce a terminology slanted in these directions? We were interested in finding out.

The general magazines utilized in the analysis, together with their respective frequencies of publication, are: Reader's Digest (monthly); Life (weekly); Saturday Evening Post (weekly); Collier's (weekly through July 1953, biweekly August 1953 on); Time (weekly); New York Times Sunday Magazine (weekly); Harper's (monthly); Senior Scholastic

(weekly); Printers' Ink (weekly).

^{&#}x27;This unit was done by the Editor, Council for Advancement of Secondary Education.

General newspapers8.—Our newspapers more or less faithfully reflect the environment in which they are published. They convey local and general news and advocate opinions on public questions. Assessed from the standpoint of our highly complex economy, they carry a substantial amount of news and discussion of a multiplicity of economic problems and issues. To be sure, newspapers differ in this respect according to the type of readers they seek to reach. Quite understandably a pictorial newspaper or a tabloid may deal with such matters much more cursorily than a newspaper that addresses itself primarily to the serious-minded reader. But in view of the overriding influence of the economic in our society, it may be assumed that all newspapers inevitably give some space and attention to economic matters.

Owing to the large number of variable factors involved, a statistically defensible sampling of newspapers is hard to derive. The one employed in the present study was certainly not scientifically derived; yet it can be defended on a quota control basis in that many of the characteristics which seem to identify and distinguish newspaper performance have been included by design. Moreover, much can be said in favor of our selection on the ground of its representativeness, for we have included in our sampling newspapers to represent different sections of the country; rural, town, and metropolitan areas; small and large circulations; diverse economic, political, and social viewpoints; and the tabloid, typical and New York Times formats.

The sampling chosen for this study comprises ten daily and two weekly newspapers: The New York Times, The Washington Post, The St. Louis Post-Dispatch, San Francisco Chronicle, Des Moines Register, Atlanta Constitution, Rocky Mountain News (Denver, Colorado), The Baltimore News-Post, Delta Democrat-Times (Greenville, Mississippi), Columbia Daily Tribune (Columbia, Missouri), King City Tri-County News (King City, Missouri-weekly), Jonesboro Herald-Tribune (Jonesboro, Tennessee-weekly).

Farm journals*.—Despite the steady decline in the percentage of people engaged in farming, it is still America's largest single industry. A great many farm magazines are regularly published: 58 were members of the Audit Bureau of Circulations, and another 195 had filed sworn statements of circulation with Standard Rate and Data Service, as of June 1, 1955. The circulation figures for these publications make it clear that the average farm family reads more magazines regularly, by a rather wide margin, than the average city family. If justification were needed for our undertaking an analysis of farm journals as a unit in our general survey of newspapers and magazines for economic content, the preceding facts would provide it in full measure.

⁸This analysis was made at the University of Missouri under the supervision of Dean Earl English of the School of Journalism.

⁹This project was carried out at the College of Agriculture of the University of Wisconsin under the supervision of Dr. Bryant Kearl, Chairman, Department of Agricultural Journalism.

The 11 farm magazines utilized in this study do not constitute a random sampling of the farm publications in this country, and are not fully representative of their diverse types. Random sampling methods, even of the most limited sort, could not have produced a satisfactory sample without the inclusion of a larger number of magazines than was possible in the present inquiry. The selection includes: farm magazines of greatest circulation; magazines representing general farm interest as well as special types of farming (dairying, poultry, meat animal production, etc.); farm magazines regional in character; and farm magazines exemplifying various editorial positions.

The list of 11 farm magazines used in the sample, with brief notes characterizing each, follows:

Country Gentleman (later Better Farming). Monthly farm paper with nationwide circulation of over 2½ million. Covers wider range of topics than Farm Journal, with more attention to national and international affairs. About 100 pages per issue.

Farm Journal. Monthly, has largest circulation of 11 magazines selected with just under three million subscribers scattered throughout the country. A practical magazine, has higher percentage of on-the-farm subscribers than Country Gentle-

man. Each issue averages 150 pages.

he

al

d-

nt

es.

of

er vs-

ut

ay

on

lly

ed

be

ch

in-

on

ip-

m,

ic,

rk

cly

uis

on-

bia.

ng

ies-

ple

eat

the

nts

55.

the

ide

for

vey

icts

Earl

nder

Capper's Farmer. Monthly, with majority of its 11/3 million subscribers in North and South Central areas. Runs 80-100 pages per issue.

Successful Farming. Monthly, has 11/2 million subscribers, mostly in Corn Belt. Carries more editorial linage on livestock and poultry than any other farm paper. Per issue, 100-200 pages.

Progressive Farmer. Monthly, principal farm publication of the southern states, has 1¼ million circulation. Carries more advertising than any other farm journal. Similar to national magazines in content and layout; 100-200 pages each issue.

California Farmer. Semimonthly state farm paper, with highly economic and technical content. Circulation 128,000. Fifty pages each issue on pulp.

Rural New Yorker. Semimonthly state farm journal, with 300,000 circulation. Printed on pulp, 20-30 pages each issue.

Wallace's Farmer and Iowa Homestead. Semimonthly state farm journal, circulation 300,000. More like general farm magazines in content than the two state journals mentioned above. Pulp, 60-70 pages each issue.

Breeder's Gazette. Monthly, devoted to problems involved in raising different types of meat animals; circulation 168,000. Contains relatively few articles, which are usually economic in nature. Pulp, 20-40 pages.

Hoard's Dairyman. Semimonthly, circulation 327,000, carries news and research information for the dairyman. Pulp, 50 pages.

National Live Stock Producer. Monthly, circulation 241,698, carries features and news of the live stock business. Pulp, 15-20 pages.

Union journals¹⁰.—Labor being so important a group in the economy, it was imperative that union journals should be included among the publi-

¹⁰This analysis was made at Cornell University under the general direction of Dean M. P. Catherwood, New York State School of Industrial and Labor Relations, and under the supervision of Mies Leone W. Eckert, Records Librarian.

cations being canvassed for economic terms. Approximately one fourth of the labor force is organized in unions. What economic understandings must the worker bring to his reading of union journals? It was felt that a content analysis of representative labor publications for economic terms would provide an answer to this question.

For the purpose of this study, 15 union journals were chosen. They are representative of the national federations and independent unions; large and small businesses; skilled crafts and industrial unions; basic, expanding, and declining industries; different regional attitudes; and the magazine and newspaper formats. These journals reach a relatively high proportion of the total number of union members.

LIST OF UNION JOURNALS SELECTED, TOGETHER RESPECTIVELY WITH NAME OF UNION, AFFILIATION, AND FREQUENCY OF PUBLICATION

Title of Publication	Union	Affili- ation	Frequency of Publication
American Federationist	American Federation of Labor Congress of Industrial	AFL	Monthly
CIO News	Organizations	CIO	Weekly
Electrical Workers' Journal	International Brotherhood of Electrical Workers	AFL	Monthly
International Teamster	International Brotherhood of Teamsters, Chauffeurs, Ware housemen and Helpers of		
Justice	America International Ladies' Garment	AFL	Monthly
	Workers' Union	AFL	Biweekly
Machinists' Monthly Journal	International Association of Machinists	AFI.	Monthly
Laborer	International Brotherhood of Hod Carriers, Building and Common Laborers of	AFL	Montaly
	America	AFL	Monthly
Textile Laborer	Textile Workers Union of America	CIO	Biweekly
The United Automobile Worker	International Union of United Automobile, Aircraft and Agricultural Implement		,
United Rubber Worker	Workers of America United Rubber, Cork, Linoleus and Plastic Workers	CIO	Monthly
	of America	CIO	Monthly
Steel Labor	United Steelworkers of America	CIO	
United Mine Workers' Journal	United Mine Workers of	CIO	Monthly
***************************************	America	IND.	Biweekly
Labor	Non-Operating Railroad Unions	IND.	Weekly
The Dispatcher	International Longshoremen's and Warehousemen's Union	IND.	,
Federation News	Chicago Federation of Labor	AFL	Biweekly Weekly

Company publications11.—Company-published newspapers and magazines, most of them circulated largely to employees, have as one of their generally expressed purposes informing the "company family" of operations of the company and of developments within the industry which relate to employees. To a greater or lesser extent, too, these publications are designed to educate employees regarding the economic place of the employee, the company, and the industry in the American economic system. Though preponderantly edited for employees, many company publications also are circulated to shareholders. In addition, some companies send their company organs to a list of persons outside the company family, to people for one reason or another considered important to the company. Business publications with dominantly "company family" circulation are called "internals," and the bulk of the selected publications is in this category. In the aggregate, house organs are important from the point of view of both publication source and reader coverage. At the same time, their chief interest being in the economic sphere, they may be expected to be relatively abundant in economic content. It was decided, therefore, to analyze a sampling of these publications in order to determine what degree and kind of economic knowledge were required of their readers. The very number of business and industry publications introduced an element of the arbitrary in making a selection among them. They include considerable variety as to frequency of publication (from weekly to quarterly), as to size and format (from mimeographed "newspapers" to four-color magazines), and as to geographic location, kind of business or industry, and content.

An initial problem was to select from this variety a manageable sampling that would have at least some validity of representation. The areas of variety finally decided upon as criteria were kind of business or industry, geographic location, format, and frequency of publication. Size of circulation was not used as a criterion of selection, although it might well have been. Nor was any attempt made to select publications just because they were known to have heavy economic content. Although selection on the basis of unionization or non-unionization was not considered in terms of national averages, the sampling does contain representation of both unionized and non-unionized companies, with the former preponderant.

On the basis of the four criteria named above, 15 publications were selected for analysis. The diversification by kind of business or industry represented by the journals selected includes a majority of the accepted classifications. The weekly newspaper of the Chamber of Commerce of the United States, Washington Report, although not a house organ, was included because of its function as an important vehicle of industrial management's points of view in economic matters.

¹¹This unit was carried out at Cornell University under the general direction of Dean M. P. Catherwood, New York State School of Industrial and Labor Relations, and under the supervision of Professor Wayne L. Hodges.

LIST OF COMPANY PUBLICATIONS SELECTED FOR ANALYSIS, TOGETHER RESPECTIVELY WITH NAME OF COMPANY, FREQUENCY OF PUBLICATION, AND TYPE OF BUSINESS REPRESENTED

Company Publication	Company	Frequency of Publication	Type of Business
Better Living	E. I. du Pont de Nemours	Bimonthly	Chemical
Business Action 1	Chamber of Commerce of the		Management
Washington Report	United States	Weekly	generally
The Chase	Chase National Bank	Quarterly	Banking
Dravo Slant	Dravo Corporation	Monthly	Engineering construction
GE News	General Electric Company (Erie, Pa.)	Weekly	Electrical manu- facturing
Hancock News	, , , ,		
Weekly	John Hancock Company	Weekly	Insurance
Humble Bee	Humble Oil Company	Monthly	Petroleum
Illinois Central			
Magazine	Illinois Central Railroad	Monthly	Transportation
Kodakery	Eastman Kodak Company	Weekly	Non-electrical manufacturing
Pillsbury People	Pillsbury Mills	Monthly	Food manufac- turing
Safeway News	Safeway Stores	Monthly	Food distribution
Synchroscope	Detroit Edison Company	Monthly	Utility
The Textorian	Cone Mills	Weekly	Textiles
U. S. Steel News	U. S. Steel Company	Quarterly	Basic metals
Wingfoot Clan	Goodyear Tire and Rubber Co.	Weekly	Rubber

^{*}As Business Action has been out of publication since December 1951, the survey includes issues for two years of Business Action, and three years' issues of Washington Report, which replaced Business Action.

The object of analysis.—What was sought in our analysis was economic terms. What is an economic term? Clearly, the more objectively and explicitly we could define our object of analysis, the more valid our study would be. A list of criteria as stated below was set up to facilitate our recognition of economic terms, to help distinguish between economic and non-economic terms, and to guide us in our analysis of the text and in our tallying of the data.

(1) An economic term is an expression commonly found to be defined, explained, or discussed in general school or college textbooks in economics. Examples: prices, supply and demand, exports.

(2) An economic term is an expression employed in such a context as to require a certain amount of economic knowledge for its adequate comprehension.

Example: "The directors declared a quarterly dividend of 90 cents a share of common stock today." (tallied: corporation directors, dividend, stock)

(3) The inflected forms of a word are taken to be identical and are, therefore, not differentiated.

Examples: excise tax, excise taxes; picket, picketing.

(4) Economic terms proceeding from the same root or stem (cognate words or paronyms) are taken to be identical and are, therefore, not differentiated.

Examples: industrialist, industrialism, industrialization.

(5) Economic terms generally employed synonymously are regarded as referring to the same concept and are, therefore, not distinguished.

Examples: economic union, unification, integration.

(6) Economic concepts unmistakably implied in the wording, or expressed by circumlocution, are taken to be economic terms and tallied as such.

Example: "Nehru publicly deplored the prodigious fertility of Indians as a menace to the Indian economy." (tallied: population growth)

Example: "Farm prices were too high, yet the U. S. government was spending or lending more than \$11 million a day to keep them that way." (tallied: farm price supports)

(7) Many common, everyday words (especially when unrestricted by an adjective) the meanings of which are self-evident, though they may have economic connotations, are not tallied as economic terms.

Examples: money, manufacture, cash, employment, customer, job, business, taxes, bank.

(8) Terms having both general and technical meanings are tallied only when found in an economic context.

Examples: emotionally bankrupt, athletic competition. (not tallied)

(9) Certain terms employed in "practical" economics that relate to accounting and business practice are tallied as economic terms.

Examples: fiscal year, chain stores, capital.

(10) Where doubt arises as to whether or not to tally a term, it is included if it seems to require a degree of economic information for comprehension, and excluded if it may be considered to be generally understood.

Examples: barter, bonds (tallied); loss, loan, checks (not tallied).

Determining the main categories.—In view of the relatively large number of economic terms likely to be encountered, it was thought desirable at the outset to set up various main categories under which the economic terms might be grouped. This would also facilitate later recording and interpretation of the data. Accordingly, an a priori list of economic categories was derived from an examination of several high-school textbooks in economics, and economic terms met with in the analysis were listed under these main categories. Subsequently, in the process of tabulation, other categories were added as the need arose. In the final list there are twelve main categories, under which all the economic terms tallied as a result of the analysis of the content of selected newspapers and magazines were subsumed.

It is recognized that any attempt at classification of such complex entities as economic terms, many of which have multiple meanings and implications, must be at best more an arbitrary than a logical procedure. Some terms quite logically fall into several different classifications. Some of the categories themselves inevitably overlap one another. Indeed, after our content analysis had been tentatively completed, it was found advisable to move a small number of our terms from one category to another. We are not disposed to defend our classification of the economic terms on our list as the best attainable, but we do maintain it was eminently workable. After all, our main categories were set up to meet a practical need, and not to satisfy the demands of logical perfection.

Number of issues analyzed.—One fourth of the total number of issues of each magazine during the most recent five-year period (January 1950 to December 1954) was used in the analysis. The issues chosen were systematically staggered and regularly spaced to avoid any undue cumulation of seasonal influences. In the case of the general newspapers, one copy a month of each was read.

The unit of content used for analysis.—In our analysis the unit of content determined upon was the article. The contents of each issue of the sampling of general magazines were canvassed for economic terms, including articles, letters to the editor, various departments, and fillers, but excluding fiction, verse, and advertisements. In the general newspapers, news stories, columns, and editorials were read, but advertising, stock exchange tables, and news indexes and summaries where the material was duplicated elsewhere in the issue were ignored. Only the "economic" articles in farm journals were surveyed; straight market reports, home economics articles, and advertisements were excluded. Every article in each selected issue of the union journals was analyzed, the advertisements (which were found in only one of the publications used) being ignored. Since none of the company publications studied contains paid advertising, the total content of each issue was searched for economic terms.

The unit of content utilized as a measure.—The execution of a contentanalysis project such as ours posed the problem of quantitative measurement of the data. By what unit were the recurring economic terms to be measured? To be sure, the number of actual occurrences or uses of each term in the text could be recorded, but would this not likely place a premium on an accidental quality; namely, the requirements of composition, or the practice of a repetitious writer? For example, should the occurrence six times of the term Communism or one of its cognate forms in a 200-word article impute to the term thrice the importance it has in a 1,500-word article wherein it appears but two times? Patently, actual frequency of occurrence as a measure would not be valid for our purpose.

Our decision was to utilize our unit of content—the article—as the yardstick. Irrespective of its number of occurrences in a single article, an economic term was to be tallied and counted only once for each article. Thus, in all our tabulations of economic terms, the figure in each case represents not the frequency of occurrence of the term, but the number of articles in which it appears. Economic terms in the press.—As the principal outcome of the analysis of magazines and newspapers, we have five complete lists of economic terms derived from the five groups of publications as follows: from the general magazines, 244 terms; from the general newspapers, 459; from the farm journals, 543; from the union journals, 354; and from the company publications, 235. Space permits the presentation here of only the two short lists of terms that were used in the largest number of articles in the general newspapers and in the farm journals.

Some general conclusions warranted by our study of economic terms in the press follow:

- (1) The pervasive influence of economics in modern society is conspicuously reflected in the content and vocabularly of our general newspapers and periodical literature.
- (2) Newspaper and magazine articles that deal with or bear upon economic questions are replete with economic terms.
- (3) Intelligent newspaper and magazine reading requires an adequate understanding of the meaning and connotations of the economic terms commonly used therein.
- (4) Comprehension of the commonly used economic terms is indispensable for economic literacy.
- (5) Terms pertaining to our business system and to industrial relations are so frequently and freely used in the nation's press and are so essential a part of the terminology of general economics that they demand a place in the vocabulary of every responsible and informed citizen.
- (6) To meet in part the requirements for economic literacy and to ensure intelligent comprehension in newspaper and magazine reading, a selection of economic terms may be drawn for study from the five lists derived from the several types of publications analyzed in this project.
- (7) Our lists of economic terms may also be used to advantage by writers on economic subjects as a guide in the choice of technical vocabulary. It would seem reasonable in such writing to proceed on the assumption that at least the more commonly used terms in our lists have been made familiar by high-school education, and would, therefore, require neither definition, explanation, nor periphrasis.
- (8) The compilations of economic terms should also prove invaluable in suggesting evaluated topics for developing teaching-learning units in economics at every level of education.

THE REQUISITES FOR ECONOMIC LITERACY

It is generally agreed that our people are in the main inadequately equipped in economic information and understandings to cope with the complex economy in which they live, and to use it wisely both for the good of themselves and for the good of society. But unfortunately there is no common agreement on what the requisites for economic literacy are.

RANK ORDER LIST OF 58 ECONOMIC TERMS OCCURRING IN 300 OR MORE ARTICLES IN 750 ISSUES (1950-4) OF 12 GENERAL NEWSPAPERS

Rank Order	Economic Terms	Number of Articles in Which Term Appears	Rank Order	Economic Terms	Number of Articles in Which Term Appears
1	Prices	3,266	31	Rent	509
2	Labor unions	2,362	31	Mortgages	509
3	Production	2,344	33	National budget	487
4	Wages	2,027	34	Unemployment	483
5	Federal income tax	1,930	35	Demand	482
6	Stock	1,711	36	Price control	477
7	Strike	1,466	37	Capital	475
8	Profits	1,420	38	Wholesale	459
9	Insurance	1,204	39	Assets	423
10	Income	1,006	40	State taxes	418
11	Net profit	976	41	Securities	417
12	Bonds	925	41	Bank loans	417
13	Retail sales	862	43	Price supports	403
14	Investments	828	44	Deficit	397
15	Stockholders	814	45	Local taxes	381
16	Dividends	758	46	Social Security	379
17	Communism	735	47	Commodity market	366
18	Foreign aid	732	48	Futures	359
19	Corporation directors	724	49	Taft-Hartley Act	351
20	Fiscal year	707	50	Public education	347
21	Federal expenditures	669	51	Public subsidies	345
22	Credit	640	52	Cost of living	331
23	Exports	639	53	Lease	326
24	Imports	637	54	Public housing	325
25	Corporation	627	55	Federal Reserve System	323
26	Inflation	611	56	Socialism	322
27	Supply	601	57	Government loans	314
28	Labor-management co	ntract 569	58	Distribution	305
29	Interest	562			
30	Competition	541			

Where even authorities and experts fail to see eye to eye, it is patent folly to advance unsupported opinion. We have chosen rather to dig for the facts, to the end that an objective determination may be made of what constitutes economic competence for the ordinary citizen. Hence the two investigations above reported.

Especially in view of our constantly expanding and changing economy, needless to say no answer to this vital question of what the citizen needs to know can be definitive or final. With this in mind, and in the light of our research findings, we conclude our report with this explicit statement of the requisites for economic literacy:

RANK ORDER LIST OF 41 ECONOMIC TERMS* OCCURRING IN THE LARGEST NUMBER OF ARTICLES IN 225 ISSUES (1950-4) OF 11 FARM MAGAZINES

		Number of Articles in Which	Rank Order	Economic Terms	Number of Articles in Which Term Appears
Rank Order	Economic Terms	Term Appears			
1	Production	2,554	21	Rent	200
2	Price	2,044	22	Economy	199
3	Market	1,872	23	Production controls	194
4	Costs	1,557	23	Insurance	194
5	Price supports	819	25	Government loan	192
6	Profits	749	26	Co-operatives	186
7	Income	707	27	Depression	171
8	Supply	603	28	Processing	167
9	Labor	586	29	Distribution	158
10	Industry	585	30	Savings	157
11	Demand	447	31	Capital	156
12	Parity	392	32	Interest	143
13	Investment	307	33	Subsidies	142
14	Value	306	33	Inflation	142
15	Price controls	268	35	Farm program	131
16	Competition	224	36	Middleman	126
17	Wages	222	37	Credit	113
18	Prosperity	220	38	Social Security	110
19	Exports	211	39	Real estate	101
20	Imports	208	40	Tariffs	93
			40	Purchasing power	93

*Expressions that are not clearly distinguishable as economic terms except in a special context (e.g. buy, sell, own, bank, trends, worker, customer), or that pertain specifically to agriculture (e.g. farm enterprise, USDA, PMA, grower, acreage) have been excluded from this basic list.

(1) Understanding of at least the items ranked in the upper half of our Composite Evaluated List of Basic Economic Topics.

(2) Ability to read with comprehension the more thoughtful parts of the newspapers and magazines of the day as a result of familiarity with the terms enumerated in our five lists of commonly used economic terms.

(3) Information and skill sufficient to perform efficiently and wisely such functions as making purchases in cash or on credit, maintaining a bank account, entering into loan, rental, insurance, hospitalization, or other contractual agreements, carrying out tax obligations of every kind, and voting intelligently on local, state, and national issues of economic import.

It is our conviction that all who seek to attain economic literacy must strive to gain these concrete goals. They admittedly set a formidable standard of achievement in economic information and skills, but with the economy growing more massive and complex by the day, responsible and

intelligent citizenship can be bought at no smaller price.

News Notes

WILLARD GIVENS ELECTED CHAIRMAN OF U. S. NATIONAL COMMISSION FOR UNESCO—Willard Givens, former executive secretary of the National Education Association, was elected chairman of the U. S. National Commission for UNESCO at a meeting in Cincinnati, Ohio. Dr. Givens succeeds Major Gen. Milton G. Baker, head of Valley Forge Military Academy and chairman, Reserves Policy Board, Department of Defense. Dr. Givens has been associated with UNESCO since its inception and was instrumental in laying the groundwork for the organization as early as 1942. He headed the NEA eighteen years until his retirement in 1952. Since his retirement, Dr. Givens has toured Southeast Asia, completed an assignment with the Philippine Public School Teachers Association and recently undertook a survey of the Hawaiian school system.

AHE ANNOUNCES 1956 CONFERENCE THEME—"Resources for Higher Education" will serve as the theme for the eleventh National Conference on Higher Education, sponsored by the Association for Higher Education, to be held at the Congress Hotel in Chicago on March 5, 6, and 7, 1956. The Planning Committee for the conference, at its meeting held in Ann Arbor, Michigan, outlined some 35 problem areas around which the conference will be centered. Many sessions of this conference have been geared to faculty problems. The Dec. 1 issue of the College and University Bulletin carries a list of the discussion group topics.—College and University Bulletin.

1956 THEME OF AMERICAN EDUCATIONAL WEEK-The national sponsors of American Education Week have announced that the theme for the 1956 observance, slated for November 11-17, will be "Schools for a Strong America." A new feature of the 36th annual observance of AEW, the sponsors announced, will be "National Teachers Day," scheduled for Friday, November 16, 1956 "as a day for nation-wide tribute to teachers for their services to children and to the nation, and as a day to highlight the urgent need for qualified teachers to keep pace with mounting school enrolments." The sponsors said that if singling out a special day to focus attention on the role teachers play proves to be popular, National Teachers Day may become a regular feature of American Education Week. Other daily topics to be stressed during the Week in 1956, in connection with the general theme, are: "Our Spiritual and National Heritage"; "Today's Education—Tomorrow's Democracy"; "Schools for Safe and Healthful Living"; "Schools for Trained Manpower"; "A Good Classroom for Every Child"; and "Schools for a United America." American Education Week is sponsored by the National Education Association, the American Legion, the U. S. Office of Education, and the National Congress of Parents and Teachers.

COST OF DRIVER EDUCATION—The American Automobile Association has completed a report on the cost of Driver Education. This is based on a survey of 1,115 high schools involving 75,607 driver education students. This material should be of interest to secondary-school administrators and teachers. Single copies of this report are available, without charge, to driving instructors and others interested in this subject.



Everv
Parent
in
Your Town
Should Have
This Book

- It's High Time describes how adolescents grow; how (and why) teenage fads sweep the town; how mothers and dads can help you and your friends set up workable rules for curfews, dating, home chores, use of the car
- It's High Time shows how parents can work with the high-school principal and teachers to help you and your friends decide on courses of study, select a vocation, pick helpful extraclass activities, establish good study habits, and handle extra expenses
- It's High Time was published by:

National Association of Secondary-School Principals National School Public Relations Association Departments of the National Education Association

and

National Congress of Parents and Teachers

Single copy, 50c 2-

2-9 copies, 45c each

10 or more copies, 40c each

Orders of \$2.00 or less must be accompanied by payment.

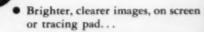
PLAYGROUND SAFETY—A bulletin, School Playground Safety, has been issued by the Michigan Department of Public Instruction. Besides pointing out the causes of playground accidents, the bulletin suggests methods by which some of these causes may be eliminated. The publication offers detailed recommendations in planning safety into playgrounds. For example, among the safety factors considered in selecting the playgrounds ite are location, topography, and soil characteristics. Other areas discussed include, "High School Playfield," "Playground Surfacing," "Playground Leadership and Management," and "Specifications for Playground Equipment." A comprehensive bibliography on playground safety is also included.

The bulletin was prepared by a committee representing education, recreation, and parks. The purpose of the committee was to develop safety materials that would be helpful to schools and other agencies that use school playground and other recreational facilities. Further information regarding School Playground Safety (Bulletin No. 1028) can be obtained by writing to the Department of Public Instruction, Lansing 2, Michigan.—Action for Safety, NEA National Commission on Safety Education.

SCHOLARSHIPS—The Union Carbide Educational Fund, created by Union Carbide and Carbon Corporation, has established four-year scholarships at a number of liberal arts colleges, technological institutes, and universities throughout the United States. Each scholarship covers the complete cost of tuition for a full, four-year academic course. It provides, in addition, reasonable allowances for the necessary books and usual fees, as established by the colleges.

Any graduate of a high school or preparatory school in the United States, or any student about to be graduated, may apply directly to the participating colleges for a Union Carbide Scholarship. Students are eligible: (1) who have good scholastic standing and personal reputation, and who are recommended by their school authorities; (2) who intend to enter business or industry and have the necessary talents and ambition for careers in such fields as accounting. administration, advertising, credit, engineering, finance, health and safety, industrial relations, international trade, law, patents, production, publicity, purchasing, research, traffic, or sales; or who intend careers in research or teaching; and (3) who either need the financial assistance or who possess extraordinary talent and ability. The selection of career-minded students and the administration of Union Carbide Scholarships are in the hands of the educators in the respective colleges. The selections, however, are guided by the purpose of the scholarship program-to give aid to deserving students. No special competitive examinations are required. It is the responsibility of the student to maintain the scholastic and behavior requirements of the college. Students receiving Union Carbide Scholarships are further encouraged, as an important part of their education, to gain the experience of employment in some industry during summer vacations. While it is expected that there may be summer employment and career opportunities in some of Union Carbide's plants, laboratories, or offices, there is no obligation on the part of either the student or the Corporation in respect to employment by the corporation. For complete information see Pamphlet F-1005 which includes a list of the colleges in which these scholarships are available. Write to: The Union Carbide Educational Fund, 30 East 42nd Street, New York 17, N. Y.

BAUSCH & LOMB tri-simplex MICRO-PROJECTOR



Faster, easier operation . . .

... than any other micro-projector in the school-budget range!

WRITE TODAY FOR CLASSROOM DEMONSTRATION and for informative Catalog E-248.

> Bausch & Lomb Optical Co., 82602 St. Paul Street, Rochester 2, New York.

See it at the American Association of School Administrators Convention, Atlantic City, February

\$150.00 18-23. B&L Booths J-20, J-21.

BAUSCH & LOMB

America's only complete optical source . . . from glass to finished product.

COLLEGE ENROLLMENT UP FOR 1955—A preliminary estimated enrollment of 2,716,000 students in the colleges and universities throughout the nation is predicted by the U. S. Office of Education for the fall of 1955. This increase of 8.6 per cent over the previous high peak of 2,500,000 students enrolled in the fall of 1954 marks the fourth consecutive year of increased enrollments in institutions of higher education in the United States. The 1955 fall enrollment estimate is based on returns from 1,196 colleges and universities which last fall enrolled more than 40 per cent of all higher education students in the country.—College and University Bulletin.

ART TEACHERS, STUDENTS INVITED TO SUBMIT NEA CENTENNIAL ART DESIGNS—Art teachers and students in colleges, universities, and art schools have been invited by the Art Advisory Committee on the National Education Association's Centennial Celebration to submit designs for art symbols to be used in connection with the Association's anniversary in 1957. Leon L. Winslow, director of art education, Baltimore Public Schools, and newly elected chairman of the Advisory Committee, has announced that a nation-wide project is to be launched to select "original and unique designs for a flag, a seal, a postage stamp, and a first-day-of-issue envelope." The designs will be used in publications and in numerous other ways to promote awareness of the NEA Centennial, Mr. Winslow said.

The Association will pay \$50 for each design chosen. The Art Committee of the Centennial Celebration will act as the jury of screening and selection. Due credit will be given to the designers whose work is selected and the NEA will protect the use of each design by copyright in its own name. All designs must be received not later than May 1, 1956. For further details of the project write to the Director, Centennial Celebration, National Education Association, 1201 16th St., N. W., Washington 6, D. C.

FROM HIGH SCHOOL TO COLLEGE-Ways of improving teamwork between secondary schools and colleges was discussed by 400 high-school and college administrators and teachers at the eleventh annual Higher Education Conference on December 10, 1955, at New York University. The conference was sponsored by the departments of higher education and secondary education at NYU. Dean Ernest O. Melby of the School of Education greeted the participants and Dr. Carroll V. Newsom, executive vice chancellor of NYU, gave the keynote address at the general session. Dr. Newsom's topic was "Better Articulation Between Secondary School and College: Four group meetings on various phases of the conference theme followed the opening talk. Dr. Forrest E. Long of NYU was chairman of the meeting on "Better Articulation for General Education Programs." The address on the subject was delivered by Professor Theodore D. Rice of NYU. Panel members for the discussion following this talk were: Professor Germaine Bree, NYU's Washington Square College of Arts and Science; Marvin Blythe, State Education Department, Albany; Bernard Freidberg, Weequahic High School, Newark; Oliver W. Melchior, principal, Scarsdale, N. Y., High School; and Paud E. Brandwein, Joint Council on Economic Education.

Professor Frederick L. Redefer of NYU was chairman of the session on "Cooperation of Secondary Schools and Colleges in Acceleration of Gifted Students." Dr. Morris Meister, principal of Bronx High School of Science, New York City, gave the address. Panel members were Walter S. Watson, director of admissions,

It takes more

For more than half a contury, Greez Shorthand has been striding forward to become the leading shorthand system in the world and the Standard Shorthand System in the United States

han a product

The Green achievement is due to more than the product itself.

Green Shorthand has been supported by a cervice . . . a service of publishing with many facets:

A series of outstanding textbooks designed to provide quality training and provided business curriculum.

(formerly the Gregg Writer),
the leading magazine in the field.

A complete series of qualifying tests and the complete series of q

Professional teaching alia. Hundreds of special teacher's handbooks and manuals have been prepared and histributed without charge . . . teacher's handbooks that are teacher's methods books, as well.

Resident carties specialists. A staff of experienced teachers and teacher-trainers who have made hundreds of talks, demonstrations, and workshop appearances.

Definitely ... it lakes more than a product
... tree though the product be as outstanding as Gragg Shorthand.

Grogg Publishing Division HeGran-Mil Book Company, Inc.

TEATHER THROUGH: FUEL IEWIN

The Cooper Union; Mrs. Madeline F. Coutant, associate in secondary curriculum, State Education Department, Albany; Associate Dean Frank H. McCloskey of NYU's Washington Square College of Arts and Science; Professor Joseph Leese, New York State College for Teachers, Albany; John Henry Martin, curriculum co-ordinator, Manhasset, New York, Public Schools; T. Leslie MacMitchell, College Entrance Examination Board, New York City.

Walter H. Wolff, principal of William Cullen Bryant High School, Long Island City, gave the address on "Better Counseling and Selection for College." Professor Velma D. Hayden of NYU was chairman of the session. Panel members were: Edwin Adkins, director of education, State College for Teachers, Albany; Howard Garrett, co-ordinator college guidance, Brooklyn Technical High School; William D. McIvers, assistant to the dean of admissions, NYU; and Harold Zuckerman, college admissions and scholarship co-ordinator, New York City Board of Education.

Associate Dean Ralph E. Pickett of the NYU School of Education was chairman of the session on "Better Articulation Between Secondary School and Community College." President Lawrence L. Bethel of the Fashion Institute of Technology, New York City, delivered the address. Panel members were: Alexander Efrom, chairman of the physics department, Stuyvesant High School, New York City; Professor Elbert K. Fretwell, Jr., Teachers College, Columbia University; Walter M. Hartung, vice president-director, Academy of Aeronautics; Dean Charles W. Laffin, Jr., of New York City Community College; and President Frederick deWolfe Bolman, Jr., of Jamestown, New York, Community College.

AUTO SAFETY BELTS—The Association of Casualty and Surety Companies has announced its support of the National Safety Council's endorsement of automobile safety seat belts. The Association's position was made known in the following statement by Thomas N. Boate, manager of its Accident Prevention Department: "Based on the findings of the Cornell Auto Crash Research Program of the Cornell Medical School, the Association of Casualty and Surety Companies, through its Accident Prevention Department, expressed complete concurrence with the public policy of the National Safety Council urging the use of safety seat belts as a means of preventing personal injury and death in automobile accidents." In making this statement, Mr. Boate urged that such belts meet the standards of manufacture and installation of the Society of Automotive Engineers and/or the American Standards Association. Buyers of seat belts, Mr. Boate advised, should exercise caution in their selection of belts to be sure that installation will withstand the impact loading these standards-making organizations recommend as minimum safety requirements.

LISLE FELLOWSHIP PLANS FOR SUMMER 1956—Summer programs to include groups in various parts of the United States, Europe, and the East have been announced by DeWitt C. Baldwin, director of the Lisle Fellowship, Inc., 204 South State Street, Ann Arbor, Michigan. A Lisle Fellowship creates opportunity for individual growth through group experience in a variety of intercultural relationships—through co-operative living and community participation. Lisle Fellowship units in 1956 will include: San Francisco, California (June 18 to July 30—for 40 students and young adults); Lookout Mountain, Colorado (July 20 to August 31—same size group as California); Puerto Rico (July 1 to August 12—for 15 from the United States to be joined by an equal



BUY the BEST BUY BALFOUR

FRATERNITY MEDALS & CLUB AWARDS

CLASS RINGS CERAMICS

TROPHIES & DIPLOMAS & ANNOUNCEMENTS

L. G. BALFOUR COMPANY
ATTLEBORO, MASSACHUSETTS

Exercise in your doorway with the original OLYMPIAN

DOORWAY GYM BAR

All steel, chromium plated. No nails or screws. Install or remove instantly. Holds 250 lbs. Valuable booklet of exercises included. GUARANTEED.







Send for Catalog to

DOORWAY GYM BAR CO.

4720 N. Kilpatrick Avenue Chicago 30, III. number of Latin Americans at location); Denmark (July 1 to August 12—\$600); Germany (July 20 to August 31—\$600); Japan (June 28 to August 31—\$1,585); and Philippine Islands (June 28 to August 31—\$1,585).

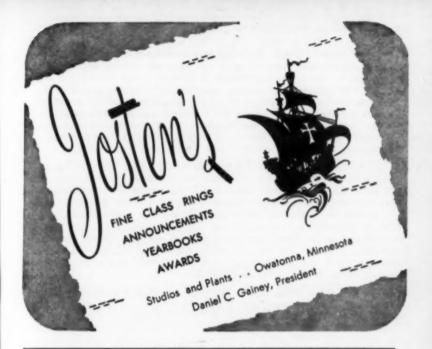
The Lisle Fellowship is a member organization of the Young Adult Council of the National Social Welfare Assembly, and other groups and co-operates with the Institute of International Education. Further information may be secured by writing Mr. Baldwin at the Lisle Fellowship, Inc., 204 South State Street, Ann Arbor, Michigan.

DEANS OF WOMEN TO HOLD NATIONAL CONVENTION IN CINCINNATI-The 36th annual convention of the National Association of Deans of Women (NADW) will be held in Cincinnati, Ohio, March 22-25. Convention theme will be "Freedom and Responsibility: Unchanging Values in a Changing World." Deans and counselors from all areas of education-junior high school, high school, college, teachers college, university-will hear such speakers as Ethel Alpenfels, professor of educational sociology and anthropology, New York University: Emily Taft Douglas, wife of Sen. Paul Douglas; and Helen Cheney Bailey, associate superintendent, School District of Philadelphia. Dr. Alpenfels will speak on "The Philosophy of Groups," and Mrs. Douglas will discuss "The Role of Women in National Affairs Relating to Freedom and Responsibility." Dr. Bailey's topic will be "Balance of Freedom and Responsibility in Faculty, Students, and Community." Doris M. Seward, acting dean of women, Purdue University, will be in charge of the convention program. M. Eunice Hilton, dean, College of Home Economics, Syracuse University, is NADW president.

THE NEA TRAVELER—This is the tenth anniversary of the NEA Travel Division. The many suggestions received from hundreds of teachers through the years have helped the division to build one of the world's most extensive educational travel programs.

It is estimated that the division has saved the teachers an estimated 400,000 travel dollars. In addition, the division has made it possible for participants not only to earn academic credit while traveling, but also to reap concrete advantages upon his return to the classroom and the community. Quite a number of different tours for next summer have been arranged, such as: Western United States (June 25 and August 2, three weeks—\$400.); Alaska (July 8 and 19, 12- and 21-day tours—\$400 to \$850); Hawaii (July 7 and July 23—\$550 to \$670); Mexico (3 to 5 weeks—\$265 to \$475); Central America (June 20 to July 12, \$750); New England (June 20 to July 4—2 to 3 weeks, \$300 to 375); South America (July 18 to August 26—\$1,550); Europe and the Near East (July 10 to August 21, \$1,495); Round the World (June 21 and June 28—7 weeks—\$2,000).

The United States Government in Action is the name given a program for teachers and others in the field of education and offered for the first time next summer. Five weeks will be spent in the Nations Capital by the participants. The sessions will be held, not in classrooms, but in such places as a conference room in the Department of State, in Senate and House of Representative Caucus rooms, in the FBI offices. The instructors will be government officials, Congressmen, educators, and scientists. Participants will hear from Pan American Union officials the place of that organization in world affairs. They will be given the story of the activities of the Federal government in the field of health by doctors in the National Institute of Health while observing the activities of the Institute.



Every

GOOD TEACHER

gets EXCELLENT RESULTS

when using

An Overhead Projector with Flashmeter®

A Wealth of Materials to Flash

A Manual built on the Experiences of Thousands of Educators — giving Day-to-Day Procedures

Unequalled Effectiveness in the teaching of reading—both Remedial and Developmental—has resulted from this modern implementation.



It's fine if you have a reading specialist — but thousands of classroom teachers are getting excellent results.

Numerous Studies have measured the gains made by using the Keystone Tachistoscopic Service in teaching reading. Write for these Studies, or a Demonstration, without obligation. KEYSTONE VIEW CO., Meadville, Pa.

KEYSTONE TACHISTOSCOPIC SERVICE

The story of national defense will be discussed by military officials at the Pentagon. The discussion of conservation, public lands and policies relative to the Indians will be held in the Department of Interior. Problems in the field of education will be presented at the Department of Health, Education, and Welfare and at the National Education Association headquarters. Academic credit may be earned by participants. This program or seminar is sponsored in co-operation with the National Council for the Social studies. For additional information about these tuors write to: NEA Travel Division, 1201-16th Street, Northwest, Washington 6, D. C.

HIGH SCHOOL ASSEMBLY KIT—The National Foundation for Infantile Paralysis has recently prepared a pamphlet, entitled High School Assembly Kit. Included in the kit are source materials for student use and suggestions for organizing an assembly program either as a panel, a 3-way talk, a dramatic skit, a quiz, or a speaker presentation. There are also suggestions for follow-up activities in science, biology, English, civics, and other classes. Through such an assembly, high-school students can be given the important facts about polio and the need for immunization. The kits are available to public, parochial, and private secondary schools through local chapters of the National Foundation for Infantile Paralysis.

OUR SCHOOLS DEMANDS—Classroom construction during the current school year will increase more than 10 per cent over that of 1954-55, according to preliminary state reports to the U. S. Office of Education. States reported 66,300 classrooms are scheduled for completion during the current school year, as compared with 60,000 last year. The survey, which covers public elementary and secondary schools, including kindergartens and junior high schools, indicated overcrowding in classrooms has been reduced by about 10 per cent for the nation as a whole this year. Decreases in shortages were indicated by about half the states. Commenting on the survey, U. S. Commissioner of Education S. M. Brownell said, "The report indicates some progress in meeting school needs, but much more progress is needed."

Total enrollment in public elementary and secondary schools increased by approximately 1 million pupils, or 3.5 per cent over last year. The increase for elementary schools was 3.7 per cent; high schools, 3.1 per cent. States reported 73,000 more teachers than a year ago, the 1955 total being 1,139,000. However, six states (Illinois, Kansas, Maine, Minnesota, Pennsylvania, and South Dakota) reported fewer teachers were employed. The increase in total teachers employed was 6.9 per cent. Thus the percentage increase in teachers was greater than the increase in pupils and resulted in an overall slight reduction in number of pupils per teacher. (27.7 to 26.8).

Survey figures showed 2,385,000 public elementary and secondary school pupils in excess of the normal capacity of accessible publicly owned school plants in use. As compared with 1954 (2,644,000), this represents a decrease (9.8 per cent) of more than a quarter of a million pupils reported a year ago. Officials said several of the state figures are being rechecked, but it would appear there is a decrease in about half of the states.

The number of teachers reported as teaching under sub-standard credentials appeared to be less than a year ago because of changes in reporting by the states, particularly Louisiana, Massachusetts, and Missouri. Excluding these

YOUR LIFE PLANS AND THE ARMED FORCES

A unit of study to help high school youth fit service in the Armed Forces into their educational and vocational plans. Complete description of educational opportunities in the services. Prepared by a special committee of the North Central Association of Colleges and Secondary Schools. Approved by the National Association of Secondary-School Principals. 160 pages, 8½ x 11, workbook format, \$2.00, Teacher's Handbook, \$0.60. Quantity Discounts on class orders.

New editions of American Universities and Colleges, 1956 and American Junior Colleges, 1956 ready in April.

Published by

AMERICAN COUNCIL ON EDUCATION

1785 Massachusetts Avenue, Washington 6, D. C.

McKNIGHT SHOP BOOKS

Celebrating 60 YEARS OF EXPANDING SERVICE TO EDUCATION
... with ultra-modern new home now under construction

GENERAL SHOP BENCH WOODWORKING

#1 By Fryklund and LaBerge. Completely revised Jan. 3, 1955. Provides instruction in basic handtool operations. Includes interesting new projects, important technical and related information. 387 "show-how" illustrations. Now available in two bindings. Cloth bound \$3.00. Paper bound \$1.25

MACHINE WOODWORKING

#2 By Robert E. Smith. Detailed instructions for operation and care of lathe, circular saw, band saw, jig saw, jointer, planer, mortising machine, etc. 224 "show-how" illustrations. \$3.00

GENERAL PRINTING

e

f

y n n

t,

e

t.

ic

or s.

nt

to

nt

ed r, ry lihe

lf S.

is,

by

or

er,

a) ed

an

of

ils

in er als ere als

ese

#7 By Cleeton & Pitkin. Standard text for beginning students. Includes 10 new units and numerous photographs showing printing procedures, equipment, layout, design, history, etc. 200 pages, \$3.00

GENERAL DRAFTING

#15 By Fryklund and Kapler. Beginner's text presenting the fundamentals of drafting. 430 illustrations. \$1.23



DEPARTMENT 328 . MARKET & CENTER STS. . BLOOMINGTON, ILLINOIS

three states, survey figures show a net increase of 2,700 in the number of teachers with substandard credentials this year—73,900 as compared with 71,200 in 1954.

This report is titled, 1955 Statistics on Enrollment, Teachers, and Schoolhousing in Full-Time Public Elementary and Secondary Day Schools. It is U. S. Office of Education Circular No. 467 (preliminary) prepared by Samuel Schloss and Carol Joy Hobson, under the direction of Emery M. Foster, Research and Statistical Services Branch, Office of Education, Washington 25, D. C.

"CREATIVE THINKING, LIVING, AND TEACHING" TO BE THEME OF ASCD 1956 CONFERENCE-The eleventh annual conference of the Association for Supervision and Curriculum Development (ASCD) of the National Education Association will be held in New York City, March 19-23. Major aspects of the conference will be built around the theme "Creative Thinking, Living, and Teaching." George W. Denemark, ASCD executive secretary, said in announcing the conference that variations of the theme will be presented all during the meeting by top educators from all parts of the nation. Harold Taylor, president, Sarah Lawrence College, Bronxville, N. Y., will serve as chairman and moderator for a panel discussion on creative thinking; Harry and Bernice Moore of the University of Texas will discuss creative living in a conversational lecture at the second general session. Laura Zirbes, professor emeritus of Ohio State University, will use creative teaching as the theme of her address at the third general session. Ethel Huggard, associate superintendent, New York City Public Schools, is chairman of the general arrangements committee for the conference.

COMMUNITY JOB SURVEY—In Mason City, Iowa, by a special vote of the Board of Education, all the teachers in town were released from their classrooms for one day to participate in a full-scale community job survey. Preceding that day, however, were months of preparation, planning, and organizing by committees made up of school administrators and teachers working under a coordinator's direction. The Policy and Planning Committee made initial plans for the survey. The Enumeration Committee developed questionnaires and other necessary forms for recording data on Mason City's occupational structure. The Geographical Committee lined up 1,167 firms to be contacted and zoned the city according to the location of these firms. The Publicity Committee supplied speakers to various groups and prepared press and radio releases, interpreting to the public-at-large the purposes and methods of the survey. The Classification Committee was to tabulate all data collected on job distribution, stability, trends, and turnover.

Employer Contact Day was set for early in April. Two weeks before, questionnaires and interviewing techniques were pre-tested in a trial run to see if modifications were needed. Then on the morning of the big day, Mason City's entire instructional staff of 253 teachers was briefed on using the forms and techniques for effective interviewing. Each teacher, assigned to interview representatives of five or six firms during the day, was to collect detailed data on all payroll jobs in terms of labor supply, entry requirements, and turnover.

The mass of job information gathered on Contact Day was coded according to occupational title, assembled into comprehensive charts, graphs and tables, then checked and rechecked for accuracy. When whipped into shape, it became a 96-page report titled *The Mason City Iowa Occupational Survey*. Funds for printing 500 copies of the report were donated by the local Rotary Club.

American GOVERNMENT in TODAY'S WORLD

By ROBERT RIENOW

Challenging! Essential!



THIS text presents American citizenship in the framework of the current world-wide responsibilities of our nation. It gives the young citizen an appreciation of the goal of our foreign policy, and an understanding of the motives of our legislation.

D. C. HEATH AND COMPANY

Sales Offices: Englewood, N. J., Chicago 16, San Francisco 5, Atlanta 3, Dallas 1

Home Office: Boston 16

New!

nd

re-

all

to

en 96-

nt-

A BOOK THAT GIVES OUR GOVERNMENT LIFE AND MEANING FOR AMERICAN YOUTH

UNDERSTANDING OUR GOVERNMENT

By George G. Bruntz

THIS new book gives high-school students a remarkably clear and interesting picture of every field of American government. It explains fully how our governments are elected, how they are organized and function in their three branches. *Understanding* Our Government is exceptionally rich in activities that put the student to work on civic problems. Write for more information.

GINN AND COMPANY... Home Office: Boston

Sales Offices: New York 11 Chicago 6 Atlanta 3 Dallas 1
Columbus 16 San Francisco 3 Toronto 7

This herculean survey was made possible by the combined efforts of the Board of Education, Iowa State College, the State Department of Vocational Education, and the State Employment Service. Additional community support came from such groups as the Junior Chamber of Commerce. Apart from its usefulness in counseling individual students, the extensive information secured by the survey provides an invaluable tool in industrial, community, and educational planning. For details, write to: Frank E. Wellman, Iowa State College, Ames, Iowa.—National Child Labor Committee.

IMPROVED READING SKILLS—"More than ever before, high schools throughout the United States are helping students improve their reading skills and solve their reading problems," writes Hardy R. Finch, English chairman of Greenwich, Conn., High School, in an article entitled "Reading in the Modern High School," in the November 12, 1955, Christian Science Monitor. Mr. Finch, who directed the Marshall College Reading Workshop last summer and is a contributing editor of Scholastic Teacher, gives a comprehensive and concise view of high-school reading including the use of tests, improvement of reading skills through the use of classroom magazines, the stimulation of interest in reading by audio-visual aids, book talks and the Teen-Age Book Club, reading instruction in several subject areas, the work of the reading co-ordinator, and the use of machines in developing reading skills.

HISTORY SERVICE CENTER AIDS—The American Historical Association will establish a service for teachers of history in Washington, D. C. next year, designed to help close the gap between historical research and the school classroom. The association has received a grant of \$148,000 from the Ford Foundation to carry on the activities of the center on an experimental basis for three years.

"The association believes it desirable to bridge the gap between the specialists in historical research in the universities and the teachers of history in the schools," it said. "It hopes to provide scholarly leadership in the attainment of high standards of history teaching throughout the nation." The center will prepare and supervise preparation of various types of pamphlets to aid secondary teachers: Graded reading lists, pamphlets summarizing recent research and interpretations in the fields of history taught in the schools, discussions of the objectives and values of historical study and other subjects which conferences with teachers show to be useful.

"The association has no intention of entering the field of methods of teaching, already amply cared for by experts in education," the announcement said. The center will establish a list of 50 to 60 recognized professional historians in various parts of the country who are willing to consult with school administrators and teachers at their request. They will be ready to give specific advice on courses and materials in the history courses in schools.

The association has long been interested in the teaching of history in the United States. Since 1895 seven committees produced and published more than 20 volumes and shorter reports which have been widely used. The association now has a permanent Committee on Teaching. The association has quarters at the Library of Congress. It has not been decided where the center will be located. —The Sunday Star, Washington, D. C., December 4, 1955.

OHIO DISCUSSION GROUP CO-ORDINATOR ACTIVE—At the request of the Executive Committee of the Ohio High School Principals Association,

Does Your Library have a Speech Department?

Today's

THOUGHTS ON PROBLEMS BY

VITAL SPEECHES

gives the complete text of the best expressions of contemporary thought at a very nominal cost.

Recommended in Magazines for School Libraries Periodicals for Small and Medium Sized Libraries

indexed in the "Reader's Guide"

Issued 1st and 15th each month

One year \$6.00 Two years \$11.00 9 months \$5.00

Sample copy on request

VITAL SPEECHES

33 West 42nd Street New York 36

BLACKBOARDS

Slate, compo, steel, glass, etc. Cork Bulletin Boards, cut to measure. Installed by you or by Acme.

RE-SURFACING

No paint or sanding machines used. 25-year guarantee. Send for Do-It-Yourself Kit. \$3.50 enough for average classroom.

ACME SLATE BLACKBOARD CO.

254 Third St., Brooklyn 15, N.Y.

Inspiring new texts for 1956

MAGRUDER'S AMERICAN GOVERNMENT IN 1956

Revised by W. A. McClenaghan

Nation-wide leader for 39 years . . . now completely rewritten! Includes brand-new cover in color plus 4 other color pages . . . open typography . . . 130 all-new illustrations . . . new, helpful exercises . . . expanded Appendix with a new Index and 3-part bibliography. Workbook, Tests, and Teachers Manual available.

HUGHES' THE MAKING OF TODAY'S WORLD

Revised by C. H. W. Pullen

Completely revised world history designed to orient students to today's world. New features include: pronunciation guide . . . short sentences and paragraphs . . . all 4-color maps arranged in chronological order . . . new titles in reading lists . . . up-to-the-minute coverage. Workbook, Teachers Manuals, and Tests available.

HUGHES' BUILDING CITIZENSHIP

Revised by C. H. W. Pullen

Brand-new edition of text that encourages good citizenship through projects and practical application. Highlights include entirely-new format and cover . . . over 40 new cuts . . . extensive use of italics . . . revised activities and reading lists . . . up-to-date material. Workbook and Teachers Manuals available.

Allyn and Bacon, Inc.

BOSTON · NEW YORK · CHICAGO ATLANTA · DALLAS · SAN FRANCISCO Charles P. Lindecamp, Principal of the Garfield Heights High School and State Co-ordinator of Discussion Groups held a meeting at the Faculty Club of Ohio State University with all regional co-ordinators to consider the recommendations of the Third Co-ordinating Conference for Improvement and Instruction as these recommendations applied to the high-school principal discussion groups. It is encouraging to note the leadership that the Ohio High School Principals Discussion Group is providing to the improvement of the educational opportunities for the youth of Ohio.

MCA ANNOUNCES SCIENCE PROGRAM FOR ASSISTING JUNIOR HIGH SCHOOLS—As part of its expanding activities in the field of education, the Manufacturing Chemists' Association is embarking on a program designed to assist science teachers and students in the junior high schools. Formulation of the program is now being completed, and pilot testing in a few school systems in various sections of the country has already begun. Once the program has been perfected it will be made available to MCA member companies for execution in their own plant communities.

This program was announced by Glen Perry, assistant director of public relations of E. I. duPont de Nemours and Company, Inc., and chairman of MCA's Industry Education Program Committee. Mr. Perry states: "In our planning we have considered it advisable to establish a rough blue-print for the next five years, encompassing a range of activities from the elementary levels through the senior high schools. The pilot program for the present year, gauged for the junior high school alone, involves the preparation, use, and testing of materials such as a teacher's source and experiment book, a student experiment booklet, a wall chart, and a vocational guidance publication."

EUROPEAN STUDY TOUR IN COMPARATIVE EDUCATION—Wayne University's College of Education again approves credit for the European Study Tour in Comparative Education. Personally conducted by Professor William Reitz, this ninth annual tour will leave Detroit on June 19, 1956 and return September 2, 1956. Qualified persons may earn up to eight hours of graduate or undergraduate credit. The tour is designed for students, teachers, and professional people interested in the life and culture of Europe. It offers opportunity to survey Europe's educational, social, and civic institutions; confer with the leaders; visit schools and universities; talk with the people; view Europe's famous landmarks such as cathedrals, castles, art galleries; enjoy Europe's gaieties such as plays, operas, and festivals; and absorb the atmosphere of old world cities. Further details and information may be obtained from Dr. William Reitz, College of Education, Wayne University, Detroit, Michigan.

HIGH SCHOOLS USE CORRESPONDENCE STUDY COURSES—During the summer months, more than 100 high schools in Michigan enrolled approximately 200 students for high-school credit courses offered by the Correspondence Study Department of the University of Michigan. This department offers a valuable supplement to the high-school curriculum, making it possible for many students to receive instruction in subjects not taught in the local high schools. When enrolled by their schools, the students may earn credit toward their graduation.

Some schools have enrolled entire classes for particular courses; the third semester of Latin has the highest group enrollment at present. Most of the accepted academic courses required by high schools are offered through corres-

CORRESPONDENCE STUDY

Home study by correspondence presents a number of specific advantages. The correspondence method permits study in spare time without interfering with work, school, home or social activities. Each student sets his own pace—as fast or as slaw as circumstances permit or make necessary.

Home study by correspondence is recommended by educators for drop-out students who should continue their education. Many secondary schools are using I.C.S. courses to supplement present curriculum or to supply courses not provided.

I.C.S. is the oldest and largest correspondence school with 277 courses. Business, industrial, engineering, ocademic, art, high school. Direct, job related. Bedrock facts and theory plus practical application. Complete lesson and answer service. No skimping. Diploma to graduates.

Available to educators: complete Vocational Guidance Manual listing all courses, subjects covered, synopses and I.C.S. methods.

INTERNATIONAL CORRESPONDENCE SCHOOLS

Box 4759

r

8

Ø

h

1e

ls et, ne

Ìу

m

OT

ty

he

e's e's

bld

m

ar-

IP-

es-

ent

ble

igh

ard

ird

the

res-

Scranton 9, Pa.

To New Authors

We will publish, promote and distribute your book. We are among the largest leading publishers in the U. S. Our plan insures prompt publication. Manuscript reports submitted in one week. No obligation.

Send for Brochure BL

PAGEANT PRESS

130 West 42nd Street . New York



The National Honor Society

A good Student Council project to establish a chapter. For information write to the

NATIONAL ASSOCIATION OF STUDENT COUNCILS

1201 Sixteenth Street, N.W. Washington 6, D. C.

CONSUMER LIVING

Prepared by

Dr. Fred T. WILHELMS

for the

CONSUMER EDUCATION STUDY

A textbook on Consumer Education for use in the upper years of the senior high school. 608 pages

\$3.80 less 25% school discount

Order from

NATIONAL ASSOCIATION OF SECONDARY - SCHOOL PRINCIPALS

1201 Sixteenth St., N. W. Washington 6, D. C.

FAIR-PLAY FB-50



- All aluminum alloy
- Choice of standard colors
- Telephone dial control
- Big 24" numbers; 3 colors
- May be converted to baseball
- Relays un-plug for ease of service. Order early!

Fair Play Mfg. Co.

West Des Moines, Iowa

pondence study in the fields of English, languages, mathematics, social studies, and commercial studies. Information concerning correspondence study and bulletins describing the courses offered on high-school and college levels may be obtained from the Correspondence Study Office, Administration Building, University of Michigan, Ann Arbor, Michigan.

THE SOCIOGRAPH—The Bonney-Fessenden Sociograph is essentially a chart designed to simplify the recording and interpreting of sociometric data. All the recording spaces required for a complete sociometric appraisal have been conveniently arranged on the inside of a specially printed manila folder. Students are asked to indicate on an "answer slip" (containing number which have been previously assigned to their classmates) which children they would most like to work with on a project, committee, etc., and, if conditions are satisfactory to the teacher and students, those with whom they would prefer not to work (the actual question asked varies and is phrased by the teacher). Then the choices given and choices received can be plotted quickly for members of groups up to forty in number. The Sociograph employs one triangular-shaped graph for this. Actually, this graph is one half of the familiar square tabulation chart. By dividing each square into two halves on the Sociograph and by plotting data in an easily established pattern, mutual choices occur in one square, and the particular group choice-patterns are readily revealed. A circle can be drawn around mutual choices to make identification easy. This is the unique and time-saving feature of the Sociograph. Everything needed to administer, record, and interpret the Sociograph for a class of forty; i.e., one manila folder, one manual, and five sheets of eight perforated answer slips, can be secured for 50 cents from California Test Bureau, 5916 Hollywood Boulevard, Los Angeles 28, California.

LEADERSHIP ROLE OF THE PRINCIPAL-Woodrow W. Wilderson, State Supervisor of Secondary Education and State Co-ordinator of the Virginia Association of Secondary-School Principals reports that the Virginia High-School Principals decided to study the leadership role of the secondary-school principal. After a number of meetings of its advisory committee, the 1955 High School Principal Conference was planned to serve as a means of launching the study. The principals agreed to accept the challenge of the study and proceeded to set up and perfect the necessary district machinery needed for carrying out the study. A workshop was held in Richmond for the purpose of providing the needed co-ordination and of preparing in some detail suggestions for the study for the year 1955-56. Fourteen challenges were prepared in terms of the problems chosen for study by the different districts in the state. As a result of this work, the Virginia Association of Secondary-School Principals has prepared a 64-page bulletin to serve in these districts as a guide for the study. The publication gives: (1) a brief history of the development of the study, (2) a tentative outline for planned discussions, (3) suggestions to leaders and recorders of district groups relative to procedures and plans for carrying forward this study at the district level, (4) suggested types of study activities, and (5) a selected bibliography of the study. The study is now going on in the various districts with each district group working on one or more of the 14 challenges as outlined in the publication entitled Guidelines for the Study of the Leadership Role of the Principal in the Improvement of Secondary Education in Virginia.

Easy to understand..

a. re

h

ld

8-

to

of

ed aby

ne

ele

he

d-

ne

an

rd.

on, nia

ghool

955

ing

ro-

ing

the

the

of

re-

dy.

(2)

and for-

ies,

the

the

tion

useful in every class...

up-to-date!

in gen ious (in jen'yəs), adj. 1. clever; skillful in making; good at inventing: The ingenious boy made a radio set for himself. 2. cleverly planned and made: This mousetrap is an ingenious device. [< L ingeniosus < ingenium natural talent] —in gen'ious ly, adv. —in gen'ious ness, n. —Syn. 1. inventive, resourceful. See clever.

talent] —in gen/ious ly, ads. —in gen/ious ness, n.
—Syn. I. inventive, resourceful. See clever.
— Syn. I. inventive, resourceful. See clever.
— Ingenious, ingenious mans clever; skillful; ingenious means frank; sincere; simple: Fay is so ingenious that she will think of a way to do this work more easily. The ingenious child had never thought of being suspicious of what others told her.

par al lel o gram (par'a lel'agram), n. a four-sided figure whose opposite sides are parallel and equal. [< Gk. parallelogrammon, neut. < parallelos parallel + gramme line]



color cast (kul'ər kast'; -käst'), n. television broadcast in color. —p. broadcast (a television program) in color.

three good reasons why students reach for the

Scott, Foresman and Company

THORNDIKE-BARNHART HIGH SCHOOL DICTIONARY

GROUP TERM LIFE INSURANCE At Low Cost

For members of the National Association of Secondary-School Principals gainfully employed by an organized system of education

YOU CAN BENEFIT from the preferred risk classification of your profession through the low-cost Group Life Insurance Plan of this Association.*

YOU CAN PROVIDE, in the event of your death, a cleanup fund, a fund to finance your boy's or girl's college education, or a fund to take care of that mortgage payment.

YOU INTEND to meet these obligations if you live, but will you meet them if you do not live?

Detailed information will be furnished upon request. Write to the

NATIONAL ASSOCIATION OF SECONDARY-SCHOOL PRINCIPALS 1201 Sixteenth Street, N. W., Washington 6, D. C.

* All teachers in secondary education are eligible to membership in the National Association of Secondary-School Principals as associate members. All associate members receive all professional services and are eligible for life insurance under the Group Life Insurance Plan of the Association if gainfully employed by an organized system of education. 1956-57 COLLEGE ENTRANCE EXAMINATION DATES—The College Entrance Examination Board has announced the following dates on which the 1956-57 series of tests for college entrance will be given: Saturday, December 1, 1956; Saturday, January 12, 1957; Saturday, March 16, 1957; Saturday, May 18, 1957; and Wednesday, August 14, 1957. An announcement of the tests to be offered in 1956-57 will be distributed at a later date. For other information write to Educational Testing Service at P. O. Box 592, Princeton, New Jersey; OR at P. O. Box 27896, Los Angeles 27, California.

A HANDBOOK FOR PARENTS—The Grand Haven (Michigan) Junior High School has prepared a 12-page memeographed pamphlet, which briefly describes the curriculum of the school. The foreword of the pamphlet states: "The purpose of this book is to give you a very brief picture of the things we teach in our junior high school through our classes and the total activities of the school. We hope what you see in visiting our school and what you find in this booklet will encourage you to return and better acquaint yourself with our total program. We are anxious for you to know all about what we are doing for your boys and girls. We are always open for suggestions on how we might better our school program." Other parts of the pamphlet include the master schedule of classes, a listing of the faculty with each person's assignment, a two-page discussion of the purpose of the junior high school and brief descriptive statements and purposes of the various departments of the school. Stephen Mead is principal of the school.

DEFLATABLE GLOBE OF THE WORLD—A world globe, measuring 18 inches in diameter, that can be folded into a small package, that is unbreakable yet has all the beauty and appearance of a fine glass globe, is being introduced by C. S. Hammond and Co., Maplewood, N. J. The globe is the result of several years' experiments and will retail for \$19.95, including a wrought-iron stand. A time dial is also a feature of the new globe so that time in all parts of the world may be compared.

The plastic globe is printed in bright colors and sharp type and is protected by a laminated sheet of heavy gauge Krene so that a grease crayon may be used to chart routes and then be erased. The globe may be easily inflated by mouth and fits into a stand so that it is free to spin on its axis at the proper angle. The globe and stand weigh less than two pounds.

Caleb D. Hammond, president of the map firm, said that a Halkey-Robertson valve, which is used to keep rubber life rafts safely inflated, is used in the new guaranteed globe. All seams are welded electronically to assure maximum strength in construction and globes are inflated and tested before packing. Comparable conventional globes cost about two and a half times as much, Mr. Hammond said. In addition to a warranty, the Hammond Company proposes to inaugurate a special replacement policy. This policy will enable a purchaser of the deflatable globe to exchange his globe at any time for the latest revised model at a fraction of the original cost. Mr. Hammond says that under this plan, no school or person need be hampered by an out-of-date globe. This policy also embraces globes damaged beyond repair.







Return postage guaranteed.

PERPETUAL SERVICE AT NO COST TO SCHOOL

NO EED OWN WHEN WE LOAN

And Repair or Replace Without Cost to You.

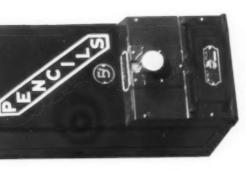
Presently

PENCIL VENDING MACHINES

MOST MODERN



proven
practical
proficient
performance
persistently
provides
plenty
potential
pencil
profits



Model 14-2

Model LM6-21

SCHOOL CUSTOMERS ENJOY OUR UNEQUALED SERVICE IN ALL 48 STATES, ALASKA, HAWAII AND PUERTO RICO.

We have been able, due to our ever expanding volume, to absorb each and every price increase of pencils since starting this business nearly 15 years ago in 1941. The continued growth in volume is now of little value in keeping down prices.

This fall, due to increased production and shipping costs, there has been another general increase in the price of pencils by the various manufacturers. To illustrate — Venus Velvet, one of our No. 1 Plan 5 cent pencils, supplied by American Pencil Company, increased to us on August 1st, 1955, more than 50 cents per gross in the largest volume lots. Our increase to you ONLY 36 cents per gross plus shipping.

Our 2 for 5¢ pencils, Plans No. 3, No. 4, and No. 5, have been increased to us $14\frac{1}{2}$ ¢, (purchased in 500 or 1000 gross lots with same printing), 29¢, and 22¢ per gross, respectively, effective December 15th, 1955. Our increase to you ONLY 12 cents per gross plus shipping.

It is realized that many of our schools wish to have a 2 for 5¢ pencil service for their students as long as possible although in the near future, the least expensive pencil at retail generally may be 3 for 10¢.

We hope to have our machine on display at N. A. S. S. P. Convention in Chicago, February 25 - 29, 1956, with a 10¢ coin mechanism which delivers 3 pencils and all machines at schools now set to sell 2 pencils for 5 cents, can be either adjusted to sell 1 pencil for 5 cents and the next 5 cents will give 2 pencils or we can exchange the coin mechanism so that a dime may be used since there might be some objection to have the first nickel deliver 1 pencil and the second nickel deliver 2 pencils.

We have held off increasing any pencil prices as long as possible and you may see from our increased costs that we are still absorbing much of the actual increase in the price of pencils.

Since students do purchase 4 to 8 times as many 2 for 5ξ pencils as the 5ξ ones, the sponsoring groups shall still realize as great, or perhaps more, profit from selling the 2 for 5ξ pencils as long as we are able to supply at these prices.

Our First Increase in Pencil Prices Since Starting Business in 1941

WE SUPPLY

PLAN NO. 1 \$5.40 per gross 6 gross	American VENUS VELVET, Dixon TICONDEROGA, Eagle MIRADO, Eberhard Faber MONGOL, LINTON CONSOLIDATED and other nationally selling 5c pencils. Also our 5c best quality "THE OSCAR" Your Cost \$32.40 — Your Profit \$10.80
PLAN NO. 2 \$5.40 per gross 8 gross	The best quality 5c pencil with SCHOOL NAME and in SCHOOL COLORS, paint one color and name in foil of the other color. Your Cost \$43.20 — Your Profit \$14.40
PLAN NO. 3 \$3.00 per gross 10 gross	Our own "EASYWRITE," an excellent 2/5c pencil. Produced in green, red, and light blue painted pencil with "EASYWRITE" imprint. Your Cost \$30.00 — Your Profit \$6.00
PLAN NO. 4 \$3.00 per gross 20 gross	The 2/5c pencil with SCHOOL NAME instead of "EASYWRITE" imprint. (Not in school colors.) Whatever in stock—red, light blue, or green. Your Cost \$60.00—Your Profit \$12.00
PLAN NO. 5 \$3.00 per gross 60 gross	The 2/5c pencil with SCHOOL NAME and SCHOOL COLORS, paint one color and SCHOOL NAME imprinted with foil in other color. Your Cost \$180.00 — Your Profit \$36.00
PLAN NO. 6 \$3.60 per gross 10 gross	The 3 for 10c pencils with SCHOOL NAME and in SCHOOL COLORS, pencil painted one school color with School Name in foil the other. (Machine available after February, 1956.) Your Cost \$36.00 — Your Profit \$12.00
PLAN NO. 7 \$5.40	The 5c round SCHEDULE, SCHOOL SONG or other SPECIAL printed pencils. These are furnished in school colors,
per gross 8 gross	Your Cost \$43.20 — Your Profit \$14.40
PLAN NO. 8 \$3.95 to \$4.70 per gross	STRATO our L-O-N-G-E-R profit inexpensive 5c bonded pencil. Enthusiastic reports from schools across the nation. Regular, School Name or School Name and School Colors are now same price.
5 gross -	\$4.70 Your Cost \$ 23.50 Your Profit \$ 12.50
16 gross —	
30 gross -	
60 gross —	
The above price	es represent increases of ONLY 4% to 7% plus shipping.

The above prices represent increases of ONLY 4% to 7% plus shipping.

PERPETUAL PENCIL VENDING SERVICE

Machine loaned to school customers and all repairs or replacements due to mechanical failure made without cost to our customers.

We prepay and add shipping to your invoice except all 60 gross orders for shipment at one time includes delivery.

PRICES EFFECTIVE JANUARY 1, 1956

Pencils Available In Your School Colors

FENWICK FRIARS



WOODRUFF SENIOR HIGH SCHOOL
1955 VARSITY FOOTBALL SCHEDULE 1955

. . . .



MAYFIELD HIGH SCHOOL

SILVER CREEK HIGH SCHOOL



FREDERICKTOWN HIGH SCHOOL



LAFAYETTE JUNIOR HIGH SCHOOL

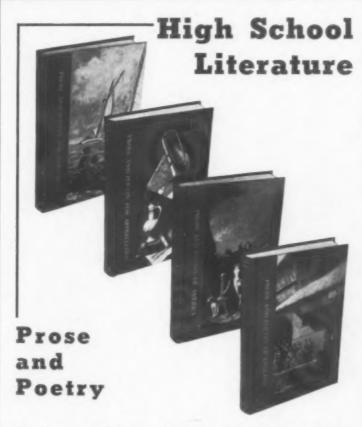


LEWISVILLE SCHOOL - YEA, BEARS









The Prose and Poetry Series contains the best in modern, contemporary and historical literature . . . only the most appropriate and teachable selections included . . . living, moving selections that inspire and challenge students to extend their reading interests . . . complete and varied study materials provided. Write today for full information.

The L. W. Singer Co., Inc.

249-259 W. ERIE BOULEVARD SYRACUSE, NEW YORK

An Outstanding THREE-ACT PLAY for

High School Production

A new comedy based on the delightful show made famous on radio and television by Robert Young.

KNOWS.... BEST

A three-act comedy. Cast, seven men; ten women; one set.

Here is a fresh and original comedy about the more light-hearted aspects of family life. While this charming play is often uproariously funny, it never loses touch with reality. The well-known and well-loved radio program on which it is based has created so much community interest that you can expect an unusual audience turnout for your production. This is a wholesome, satisfying comedy that can provide both your cast and audience with perhaps the most enjoyable evening of the year!

Royalty, \$25.00

Price, 85c

Should you wish to consider FATHER KNOWS BEST for production at your school this spring, you can receive a complimentary copy by writing to us and mentioning this advertisement in THE BULLETIN.

THE DRAMATIC PUBLISHING COMPANY

179 North Michigan Avenue, Chicago 1, Illinois

SERV